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A MANUAL

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PHYSICAL EDUCATION

FOR THE

TEACHERS

OF THE

CLEVELAND PUBLIC SCHOOLS

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OHIO STATE

UNIVERSITY

1901-1902.

THE BRITTON PRINTING COMPANY,  
Caxton Bldg., Cleveland, O.

GV 483

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## PREFACE.

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Since the Teachers' Manual of Physical Education was issued in 1896 many suggestions concerning various phases of physical education together with many sets of exercises have been printed for the use of teachers. While the system in use remains as outlined in the Manual the supply of copies was exhausted several years ago. Therefore, it seemed wise to reprint such of the matter in the manual as may still be of use and to add some of the suggestions which we have found useful in our work within the field of school hygiene.

While the system of physical training remains the same it has gradually been perfected in some of its details so that now it is much more clearly defined in the minds of the teachers than was the case five years ago. The old, restricted term "physical culture" we have come to consider a misnomer and have replaced it with the more concise term "physical training," when we refer to any of the various phases of physical exercise practised by the pupils of the schools. We now look upon school and home exercises, whether in games or gymnastic movements, as affording the neuro-muscular system of the child the general and appropriate training which is the foundation for special technical forms of physical training such as writing, drawing, successful use of the vocal apparatus, or of the hands, as in the production of instrumental music.

We have gone a step farther in bringing into use the term physical education to indicate that we not only prescribe a general physical training of the motor centers and of the activities of the muscular system which these centers govern, but that in addition we strive in various ways to educate the children in correlative matters. We suggest to them exercises which they may, with safety, practice at home. We suggest methods by which they may make home exercises and games attractive. We print sets of exercises and games and cuts which illustrate home play grounds and gymnasiums, and give them to children who desire to use them. We encourage the children to learn to swim and to indulge in similar beneficial forms of physical training in their season. We suggest to the children that they arrange to spend as much of their vacation time as they can in the country. We agitate for private and public play grounds free bath houses and in all ways within our power endeavor to suggest the provision of such facilities as will enable the children to acquire that most valuable of human possessions, a good constitution.

In the third place we enter the realm of school hygiene, and instruct the children in the more essential matters of anatomy, physiology and hygiene. We carefully explain to them the direct effects of the narcotics upon the nervous system of childhood and incidentally of their effects upon the other parts of the body. We examine their special senses and not only notify parents of defects when we find them, but we strive to modify school conditions in favor of such children. Through our teaching in hygiene we endeavor to teach the children how to preserve health through attention to all matters of personal hygiene.

Further, we consider the conditions which surround us in the school house and endeavor in so far as we can to eliminate those influences which militate against the preservation of good health. In this connection we consider the school grounds, the building, the room in its relation to the building, and the conditions within the room, such as seating and desking, lighting, wall paints, ventilation, etc., etc.



## RATIONALE OF MODERN PHYSICAL EDUCATION.

The Greeks laid such stress upon the physical side of education that it became a most important element in their educational curriculum. The one element which has distinguished Grecian public education from that of other peoples. With its successful elaboration came Grecian political and intellectual pre-eminence. With its abandonment the Grecian state decayed. During the period in which this element was prominent the Greeks furnished a far larger proportion of eminent generals, statesmen, law-givers, philosophers, orators, sculptors, poets, painters, historians and athletes, than has been the case in the history of any like number of people.

Most of these men were proud to recall their ancestors by their victories in national games, while many of them were themselves great athletes.

At the same time they were able to maintain their political supremacy against overwhelming odds. But physical training in Greece finally began to depend for its existence upon popular national games, such as the Olympian, Nemean and Pythian. Therefore it ultimately failed. Modern physical education would surely go the way of ancient gymnastics did it not rest upon a broader and more substantial basis.

The modern theory not only calls to its support the interest elicited by games but through the investigation of the physiological and hygienic aspects of the subject seeks to point out reasons for the training of the body more potent in holding the interest of humanity than were those entertained by the Greeks.

This theory holds that there is a certain correlation in the development of muscle, nerve and brain which, if fostered, maintains their health and assists largely in facilitating educational processes. That thought and feeling, judgment and volition must be expressed by the muscular acts which are under the direct control of the brain. This will be well or poorly done in proportion to the education the brain has received, (through muscular activity) in controlling the actions of the muscles. That any disturbance of this correlation interferes with the development and health of the brain thus impeding the process of education. A partial view of the physiological theory regarding the nervous element is obtained from the following quotation from Du Bois Raymond, veteran professor of physiology in the University of Berlin. "It is easy to demonstrate that such bodily exercises as gymnastics, fencing, swimming, riding, dancing and skating are much more exercises of the nervous system, of the brain and spinal marrow, preeminently nerve-gymnastics, if, for brevity, we may apply the term nerves to the whole nervous system. Man is adapted to self improvement by means of exercise. It makes his muscles stronger and more enduring; his skin becomes fortified against all injury; through exercise his limbs become more flexible, his glands more productive; it fits his central nervous system for the most complicated functions; it sharpens his senses; and by it his mind, reacting upon itself, is enabled to augment its elasticity and versatility." Mention of some of the more noticeable results which are derived from physical training will serve to illustrate its influence upon the body and the mind. Muscular strength, endurance, symmetry, quickness, grace, muscular control, self-control, physical judgment and physical courage, all find a place in the category.

Under continuous and powerful contractions a muscle gains in weight, size and strength, and while not so important an element as some would suggest, no scheme of physical education is complete which does not provide for the development of a fair degree of strength. The bulk of humanity carries a physical burden mainly because the muscles are not quite strong enough to do the day's work with ease. No matter how light the work may be it seems toilsome to muscles which have no reserve of strength above that needed for the tasks of the day. The



development of a strong muscular system should begin with the child, and if necessary artificial means, such as gymnastics should be resorted to in order to keep a fair degree of strength during adult life. This is peculiarly the case in an age when machinery and the division of labor has specialized work and allotted to a very limited number of muscles, leaving the rest out of work. These unused muscles were made to work and will make mischief if allowed to remain idle.

The continuous action of certain groups of muscles stimulates the nerves of the heart. This causes it to contract with greater force and rapidity until the blood cells fairly tumble over each other in their haste to reach and feed some nerve or muscle cells, made hungry by the unusual exertion. Loading themselves with waste products, the blood cells rush on their way to the lungs gasping for fresh air. They crowd every avenue and by-path of the lungs, calling loudly for oxygen as they throw upon the air cells their loads of refuse. At once the nerves which stimulate the muscles of respiration are excited. Powerful and rapid action takes place. Large quantities of fresh air rush into the lungs. The blood cells receive a new supply of oxygen and at once return to their work of rejuvenation. With the continuation of this process, day after day, nerve tissue responds the more readily to stimulation, muscle tissue becomes seasoned and is less easily worn out, less refuse matter is found in the capillaries, obstructing the path of the blood cells. Hence their transit from heart to cell through capillary back to lungs is accomplished with increased facility and greater ease of action of heart and lungs for the same degree of rapidity and force of muscular activity. When this correlation is established for a given exercise, or exercises, we call it endurance. This enables us to understand why a person, unaccustomed to running, can run but a few yards at first and that slowly. But with a few weeks of daily practice rod after rod will be added, the length and rapidity of the stride increased, until a mile run is a matter of less time and effort than were a few rods at the beginning.

Ideas of symmetry are influenced by interest and custom. The gymnast who confines himself to some forms of turning loses sight of his comparatively small and insufficient legs, while he admires his broad shoulders and muscular arms. Custom dictates an hour glass waist for women, and no appeal to artistic ideals or personal hygiene can divest her waist of constrictions and replace her disarranged viscera until some such influence as a gymnasium, a game, or a bicycle forces a change of custom in costume. So that while symmetry means the harmonious development of the body, who is to define harmony of proportion?

Shall we inquire of the leaders of fashion, the teacher of some special form of physical culture, the believer in averages and means, the artist, or the physiologist? Let the artist, the physiologist, and the physical trainer each select, say a thousand men whom they consider symmetrically developed, and of a given weight, height, age and type. In the selection all men who were notably deformed, undersize, undeveloped in certain parts of their anatomy, or over developed in parts, would be omitted. Then request the anthropologist, to make sufficient measurements of each man to complete the record of his proportions. The sum of the breadth of the shoulders of the three thousand men divided by three thousand, the number of men, gives us a breadth of shoulders which, when compared with other proportions, obtained in the same way of the same men, would appear to us to be symmetrical. Let the artist embody the proportions of a man whose measurements most nearly corresponded to the list of measurements of each given part by three thousand, in a full length portrait. The reproduction would be a figure in which the eye of the average individual would recognize symmetry. The heights, depths, lengths, breadths and circumferences of trunk and limbs, would be in such relation to one another that they would not infringe upon our sense of proportion. We should have before us an ideal type of one of the objects for which physical training has always striven—symmetry.



Quickness involves rapid interaction between the muscles and the brain cells which govern their action. It may be technical and the possession of a few muscles only, as in piano, or violin playing, or it may be a general accomplishment, as is often the case with a thorough gymnast. Our general concept of a quick person refers to the latter. We think of such a one as being able to perform almost any simple or complicated series of brief muscular acts with dispatch. The education of special senses, in connection with light muscular activity, has much to do with the production of quickness.

Grace comes with the ability to govern one's muscular movements to such a degree that while one group of muscles is accomplishing a movement or a series of movements, the mind is free to direct the action of other muscles in doing other movements of a totally different character, or, to restrain all muscles from exertion except those actually needed for a given effort. Perfect grace would allow the mind to use any muscle or muscles in any manner desired, with the exclusion of all antagonism from the contraction of opposing muscles. As in a portrait presenting perfect bodily symmetry the eye discovers no waste timber, so in a series of graceful movements the eye sees no actions unnecessary to the expression of the idea which the movements express or emphasize. Thus many exercises, at first difficult and demanding much strength, are done with ease and finish after all muscular antagonism is eliminated and the mind possesses a sort of automatic knowledge enabling it to call upon the muscles to be used, and no others, and enabling it to inform them of the exact amount of service required. Many forms of gymnastics cultivate grace. This is especially true of light club swinging when carried to the extent of performing difficult movements.

Among the mental effects of physical education muscular control is eminent. It underlies excellence in some of the most important work of some of the professions and in many of the trades. To obtain it the cerebellum must be trained to preside with accuracy over all simple or complicated movements attempted. Manual training brings this element into prominence and, for its popularity, depends largely upon it. With the practice of a sufficient variety of gymnastic movements to give the brain quick and good control of one or more groups of muscles, acting in a similar or in a dissimilar manner, at the same moment, with varying degrees of strength, rapidity and grace. With such practice, comes muscular control. The continued cultivation of this quality will render its possessor apt in doing all forms of exercise whether general, as in games, or special and technical as in type-writing or in performing surgical operations.

Self control comes with the confidence arising from the knowledge that our muscles are strong and enduring, able to resist; that if need be we can use them quickly and with perfect control in effecting an escape from an emergency. This confidence in our ability to act as we please enables us to hold our physical activities in check until we are satisfied that the time for their use has arrived. Self control is accentuated in games in which an individual, for the sake of his team, will compel himself to refrain from making a brilliant play which, while a loss to the team, would bring him much personal glory.

In another instance it is exemplified in the athlete who will forego many pleasures and hold himself down to the strict regimen of training in order that on the day of contest he may present splendid combinations of mental and muscular activity.

The cultivation of instantaneous and exact obedience in well executed school gymnastics is another remarkable example of the cultivation of self control.

Physical judgment enables one to tell at a glance the mathematical relationships of an object in space. The wing shot sees something suddenly emerge from a tree top. He must instantly identify it, calculate its distance from himself, its



size, the velocity with which it is traveling and the angle of flight. Then he estimates the position in which he must hold his gun in relation to the object. If the bird falls he is pleased to think that his physical judgment was correct. The pleasure derived from playing games with missiles comes mainly from the cultivation of this quality. It enables us to tell where our bodies, or any of their parts, should be in any given emergency. By it we know when and where to place ourselves in order to avoid a collision with some passing object. Its absence marks the person much in need of an accident policy.

Physical courage is a state of mind. It depends upon our consciousness that the body, from having acquired the ability to perform difficult feats through the doing of them, will readily obey us if we call upon it. A blade, tried in many a contest, we draw with confidence. The body which has been repeatedly and severely tested in its physical attributes gives its possessor a confidence in its powers which does not shrink before old or new forms of contest. Through turning the Prussians cultivated that courage in their soldiers which finally overthrew the empire of Napoleon.

The exercises which are practiced in our school work may be given in such a manner as to develop, in greater or less degree, the qualities mentioned. If these results are not obtained, it is simply because the teacher lacks variety in the treatment of the subject. The work of the drill period should be supplemented by many forms of exercise before and after school. It is hoped that the conscientious teacher will so familiarize herself with the whole subject that she will be in a position to make judicious and enthusiastic suggestions to her pupils regarding their games and other forms of exercise.

As a result of the proper cultivation of such physical and physico mental qualities, strength, gracefulness, etc., we maintain an equilibrium between the muscles, nerves and brain which admits of their free, painless, continuous and energetic action. This we call good health. Strong, symmetrically developed muscles hold the spinal column in place or, if it gets out of position on account of misfitting seats and desks, they pull it back to the normal as soon as the strain is removed. The processes of circulation, respiration, digestion, absorption and secretion are affected unfavorably by idle or undeveloped nerve and muscle tissue, while they are promoted by the activity and development of the muscles and nerves immediately incident to their existence. What better insurance against consumption than the full development of all of the muscles of respiration, the development of lung capacity and strength of lung tissue through running and other respiratory exercises such as the continuous practice of suitable breathing exercises? How shall we escape fainting if not through a strong heart muscle whose even rhythmic contractions cannot be disturbed by slight mental ailments?

The hygienic line of thought in school gymnastics is as follows: For some time previous to the exercise period all of the powers of the pupils have been concentrated upon study and recitation. In many cases and much of the time, they have been doing work in a sitting posture with the chest somewhat constricted. Often the upper part of the body has been leaning forward upon, or against the desk. While in this cramped position, bending forward and downward, the abdominal viscera is crowded upon and the venous circulation therein impeded. The same is true to a less extent of the lungs. The spine, especially in the dorsal and cervical regions, has been held in positions which, if frequently maintained, tend toward the production of curvature or rotation of the spine, or both, by strengthening certain muscles which hold it in these abnormal positions at the expense of the opposing muscles. The eyes have been at work, possibly at a wrong angle or under poor illumination, or perhaps long enough to have become tired. Prolonged concentration of the mind has depleted the brain cells, ren-



dering the mind fatigued. Incident to these conditions there is decreased respiration and force and rapidity of circulation. Hence more or less passive congestion in the muscles, brain and viscera. The relief of these conditions comes through gymnastic drills if, reinstating a vigorous respiration and circulation, all waste products which hamper the activity of the brain and muscle cells, are removed so that muscle, nerve and brain are relieved. Not only relieved, but rejuvenated. The mind is rested also through an entire change of occupation. The muscles of the eye and spine, having an opportunity to relax, spring back into the normal position. The spine and all the viscera are again in proper place, while an increasing rapidity of the reconstructive process is adding to their stability.

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## SWEDISH SYSTEM OF EDUCATIONAL GYMNASTICS.

"Starting with the proposition that the mental training of children has introduced an unnatural physical environment, which, if not corrected, will, in nine cases out of ten tell upon subsequent bodily health, and so, in too many cases, upon mental and moral health as well," this system claims "that it is one of the main functions of physical education to correct the injurious effects of the unnatural environment created by mental education, and to do this without endangering the efficiency of that mental training." In other words it proposes, primarily, "to conserve the physical man during his mental training, so that, when the period of schooling is over, he shall have a body physiologically capable of sustaining him in the work of his life."

In attempting to achieve this result the following is considered:

In order to make the work practical for the use of school children under a great variety of circumstances, little apparatus is used, and that which is used is made subservient to the exercise. In many cases alternate lines of pupils act as living supports, thus supplying the place of ordinary apparatus.

Special stress is laid upon selection in prescribing exercises, holding that anatomical deformity may result from the over use of certain groups of muscles, together with the improper use of other groups of muscles. Hence this system insists upon well trained teachers.

The school life produces anatomical and physiological faults. These the "corrective" gymnastics of this system strives to prevent or correct. Great stress is placed upon this point.

In daily work a variety of exercises are given following a certain definite "Day's Order" or "Progression." Since this is used in the Cleveland Schools essentially as followed by Swedish teachers reference to page 18, is all that is necessary, in connection with instruction, to obtain a working knowledge. A general statement of the subject is also made on pages 11 and 12 of a reprint of Medical Inspection of Schools, which was sent to the teachers some time ago.

It may be added that the advocates of the system do not approve of the use of music with free standing gymnastics, claiming that this leads to ineffective, lackadaisical movements thus squandering the time which should be diligently used in fighting the evil effects of misfitting seats and desks. This we can not agree with holding, rather, that neither Swedes nor Germans, at least in this country, have developed the art of giving calisthenic exercises with music. We further claim that not a few of the Cleveland teachers have learned this art within the past six years and that the use of music has rendered their work of greater value from the "corrective" point of view, by delighting and inspiring their children to work with a hearty good will at every opportunity.



## PROGRESSION.

To accomplish our object we use a series of movements, the first of which should attract the mind from previous lines of thought and turn attention to the gymnastic work.

1. Order movements, such as attention gymnastics! left, (right,) face! etc., are used for this purpose. They can scarcely be called muscular exercises and should take only sufficient time to enlist the attention of the school.

2. Then come movements which expand the chest and induce a fuller respiration. They include backward bending or arch-flexions and lifting or heaving movements. They may be accompanied by simple leg or arm movements. General results of this part of a series should be a better oxygenation of the blood, venous drainage, relief of the mind from previous strain, and its concentration upon the muscular response. More specifically, the arch-flexions expand the inferior portion of the chest, give extensibility to the upper part of the abdomen and straighten the dorsal region of the spine. The uplifting movements, aside from strengthening the arms, expand the superior portion of the chest.

3. Breathing exercises are then taken with the lifting movements.

4. Of the more specific movements, balance movements, co-ordinating the action of different groups of muscles, are now in place. The walks, taken while in the toe-standing position, are fair examples of balance movements. They especially cultivate grace and muscular control.

5. Back, including shoulder blade movements, such as cross a firmly executed, strengthen and equalize the muscles which hold the spine and scapulae in place. If practiced with sufficient frequency and force they prevent curvature of the spine. The West Point "Setting Up Drill," having for its object a good carriage, places great stress upon the frequent and vigorous practice of such exercises. These are usually accompanied by walks in the upper grade exercises.

6. Abdominal movements not only strengthen the abdominal muscles, but also, by alternate increase and decrease of abdominal pressure, stimulate digestion. Exercises similar to those in 2 are again practiced.

7. Lateral trunk movements consist of various forms of bending and twisting the trunk, thus not only strengthening the abdominal, intercostal and spinal muscles, but also increasing the mobility of the ribs and of the vertebral column.

8. Between the various exercises in 7 and 9 repetition of breathing exercises is required. The test of force and rapidity of movement in the series thus far, is the production of deep, free, but undisturbed respiration. Near approach to breathlessness in 7 now demands more moderate action. This is furnished, at this juncture, through slow leg and arm movements with deep breathings. While the heart is allowed to rest from the rapid beating produced by the vigorous trunk exercises and recuperate, before taking up more energetic forms of exercises, the blood, through the breathing exercises, is being well oxygenated, thus preparing it for the strenuous work incident to the jumping or springing movements. At the same time the respiratory exercise is extracting vapor from the lungs and thus preventing undue perspiration.

9. The fallouts, half crook, knee-bendings and the use of a spring in changing the position of the feet in the walks, especially when they are taken while in the toe-standing position, are examples of springing movements. These exercises, especially when accompanied with arm or trunk movements, and executed with variety, cultivate all the physical attributes heretofore mentioned. They are the most violent in the series, often leading to the verge of breathlessness, while forcing the heart to beat more rapidly.

10. To prepare for rest, exercises slowing the respiration and circulation must be taken. These are supplied by deep breathing exercises. Sometimes a



lifting movement, such as upw. stretch or a shoulder blade movement—cross a—slowly executed, accompanies the breathing. Outside of the action of the respiratory muscles, however, there should be very little muscular activity. In these, as in other breathing exercises, the inspiration should be even, full, deep, through the nose, and noiseless. Expiration should be like unto it and should force as much air out of the lungs as is compatible with comfort. Continue this class of exercises until perspiration and rapidity of heart beat are thoroughly abated. Then observe the ventilation.

Some Essentials to Success in Teaching Gymnastics in the Cleveland Public Schools.

## I.—ENTHUSIASM.

This is a mental condition resultant largely from the attitude of the mind relative to the subject of Physical Education and the physical qualifications of the body for teaching.

The first infers an intelligent study of the topic, mastery of the principles laid down and the instructions given. The second, the following of a hygienic regimen calculated to keep the teacher in condition for work. An intelligent study includes, perhaps, the reading of representative writings. In order to take an interest in a subject we need to know something about it, not only in a special but in a general way. That there is sufficient in the history and present status of physical education to awaken the keenest interest in a thorough teacher there can be no doubt. (See page 64.)

A thorough study of the rationale of modern gymnastics will give sufficient insight into the principles underlying physical training to enable the teacher to apply them in giving exercises. Having in advance a clearly defined idea of the physical, mental and hygienic results to be obtained from certain gymnastic procedures, she can observe, with heightened interest the production of these results. With increase of general and special interest, the mastery of the details of instruction becomes a matter of ease, rather than of drudgery. As time goes on and the teacher finds that through the intelligent use of gymnastics, she has wrought well defined and beneficial changes in the physical and mental make-up of her school, she will conclude that in physical training she holds an instrument most potent not only in supplementing other processes of education, but in giving her a ready control of herself, and of her school.

Teaching is an exacting profession, requiring the constant outlay of physical and mental force. So notable is this that physicians of experience state that a large proportion of the young women who teach are, in three or four years, in delicate health. Manifestly this condition is not the one in which to do our best work. Clinical teachers do not consider the work incident to teaching accountable for this state of things, but rather a lack of knowledge of what should be done to prepare and keep the mind and body in condition for these peculiar duties. Following the regimen of his trainer in preparing for a contest, an athlete will, for months, follow rigorously the dictates of hygiene. His hours of sleep will be regular, and sufficient in number. His clothing, while it will in no way hamper his body, will afford ample protection. His diet will be regular and of such character, as to favor the processes of digestion and assimilation. At regular intervals he will take exercises calculated to strengthen those mental and physical qualities most used in the contest. Gradually he gets into "condition." This means the state in which he most easily and readily exerts all physical and mental faculties brought into play in a given line of action. Within a few hours' time he can display a variety and amount of physical and mental activity which is an astonishment to an untrained man. What is true of the athlete should be true



of that mental athlete, the teacher. During girlhood many forms of physical activity should build for her a strong and enduring constitution. While at the normal school she should be carefully instructed and induced to follow such a hygienic regimen that at the end of her course her physical trainer and her physician could say: "Here is a girl in whose mental and physical powers there is harmony. While all her faculties have been strengthened nature's balance of power remains undisturbed." Practical study of this phase of her education should enable her when taking up the duties of teacher to make out for herself a hygienic regimen adapted to herself. A well balanced course of work, relaxation and recreation. A regimen in which every element of hygiene would receive proportionate attention.

Not having had the advantage of such a training in a normal a teacher should make a study of the matter. If in doubt as to just what she should do, let her consult someone in whose understanding of such matters she has confidence. After a careful review of the surroundings, of the things which she can, and needs to do, a regimen, in accord with both hygiene and common sense, can be suggested. The danger is that we rush into some fad which is so partial in its results that it soon disgusts us with the whole matter so that we fall back upon the old plan of neglecting ourselves during the ten months of the year when we most need our mental and physical vigor and spend the other two months in "vacation" trying to nurse ourselves back into some sort of condition for the opening of the school year. When teachers learn to depend on hourly vacations daily, instead of two month vacations yearly, they will have gone a long way toward making their work one of more enjoyment and less of uneasiness and pain. Then, when the long vacation approaches, they will be in shape to enjoy it rather than in condition to visit the hospital or the sanitarium.

## II.—VARIETY.

This is brought about by changes in the velocity, duration and degree of force of a movement; by combining movements thus forming complex exercises; in the use of commands, music, hall drills, new series of exercises, short talks concerning the results of exercises, etc., etc.

Rapidity or velocity varies with the character of the exercise, and its place in a series, the familiarity of the school with the exercise, the character of preceding or succeeding movements, the condition of the school as influenced by previous work, the character of the day, age of the pupils, etc. Every series should contain slow, medium and rapid movement. Rapid movement cultivates some qualities scarcely affected by slow movement.

Duration. If a movement is repeated a given number of times, or during a given number of counts, say sixteen, it is called rote work. This is a prominent element in monotony. Except in exhibition drills, and not always even in these, pupils should rarely know just when they are to finish a given exercise. An exercise may be repeated a dozen times or oftener. Each time it is repeated its rapidity and force may vary. Teachers whose schools have a thorough mastery in the use of the alphabetic positions, so that no time is lost in explanation, or in giving orders, may find it an advantage to devote six or seven minutes to another series during the afternoon. Ten minutes seems a short period in which to accomplish any result, but it is long enough, if filled with active, well arranged exercise, to have very appreciable effects upon a school. At least we cannot consistently ask for more time until we use well all of the time allotted to exercise.

Muscular strength will be gained only when the movements are done with force. This may be accomplished by doing a movement slowly and bringing the muscles used into powerful contraction and then voluntarily contracting their op-



posing muscles. If at the same time that this is being done the rapidity of the movement is increased still more powerful contraction will usually result.

Interest in a simple movement, such as cross a, can be sustained by combining it with some other simple movement, thus forming a complex exercise.

Commands may be so given as to create variety. Sometimes, when the movements are simple, execute by command. A complex exercise is usually built up by giving several alphabetic positions by command. Then counts may be used.

While some authorities discard music, we do not feel that we are ready to do so. Most of our teachers seem to recognize the danger in using it. Hence they make the music accompany the exercises and not the exercises the music. Practice will soon give a teacher sufficient skill so that she can not only direct the exercising of the school, but also govern the time. There is scarcely a feature of the exercise period more recreative and pleasure giving than good music in which the time is wisely varied to suit the character of the different exercises, varied, in some instances, during the execution of individual movements. The greatest care must be taken, however, not to let it detract from the vigor of the exercise. It should be remembered that good music will not make poor gymnastics good gymnastics. On the other hand, some of the best specimens of work are found in the rooms in which music is not used. It is upon the teacher, and not upon music, that the production of good gymnastics depends.

Teachers will find it a decided advantage to introduce new series of exercises frequently. This is one of the important elements of variety and one of the greatest advantages of the system in use. Before the close of one year a thorough teacher should be able to improvise a correct series without reference to lists of exercises. Remember that the pupils in the schools have been drilled upon the simple exercises and the doing of the simple exercises in combinations for years until they are now able to advance rapidly.

This has led to gradation. Up to the seventh year the exercises increase in difficulty from year to year.

During the sixth year seat and desk exercises are introduced. The seventh grade uses wands with exercises similar to those of the fifth grade. In the eighth year the dumb-bells are used and the forms are similar to those of the fifth and sixth years. The exercise forms are different, however, though scarcely more difficult of execution.

If we have a moral motive for persisting in a given course of action, we are the more apt to keep up our interest and succeed in it. In gymnastics the teachers can supply this by short talks regarding some of the results of exercise, their bearing upon the future constitution of the pupil and upon his ability to engage in games and sports.

She can recall the inability of the school to perform a certain exercise at first, thus illustrating their growth in physical training. She can point out to them that whatever mastery they attain is a training for the manly sports and games as well as for all of the physical activities of life. As the result of much personal experience the supervisor can heartily recommend such talks provided they are very brief, and to the point, so that they do not encroach too much upon the time of the exercise period.

Some examples of what may be termed *faults* are noted here for the benefit of teachers who desire criticism.

Loss of time through slowness in getting the school into active standing position; hesitation in giving commands through unfamiliarity with the exercises or lack of attention to instructions; loss of the attention of the school while stopping to discipline a pupil; fussing over one exercise instead of doing a series; tendency







## · INDOOR EXERCISE.

Could we follow the trite advice of the doctor and our own inclinations and "take outdoor exercise" it would be well. Unfortunately, this is out of the question for most of us during seven or eight months. It is during these months that the health of the children suffers. If we are to maintain health in cities during these months through physical exercise, it must be largely through the indoor variety, and we must make some provision for it, artificial though its forms may be.

The gymnasium is the modern muscle factory. But the supply of good gymnasiums is entirely inadequate at present. The supply of competent instructors is very limited. It will be many years before the people will be properly supplied with ample accommodations for recreation.

Three years ago some of the teachers suggested to their pupils that they practice exercises at home. During one term as many as 2,000 pupils were reported as engaged in home exercises. While such work is entirely voluntary on the part of pupils and teachers, certain teachers, who are enthusiastic about the value of exercise, presented the matter to their pupils in such a way that most of them committed and practiced exercises regularly a certain number of times a week and kept a record of the same on cards prepared for the purpose. This is true physical education. Such children form the valuable habit of exercise for its own sake.

At first we suggested that children commit some of the school exercises and practice them at home. Some times they played school and the little teacher gave the other gymnastics which made up in vigor for anything that they may have lacked in form.

Then we suggested that the children use dumb-bells and clubs while practicing their exercises. Also, that when convenient, they introduce the social element by exercising in groups and that they use the piano while so doing. We also suggested home gymnasiums. The idea is striking a root and some further suggestion along this line is now in place, through which indoor exercise at home may be made more attractive and hence more lasting and more universal.

## HOME GYMNASIUMS.

It is suggested that teachers, in the well-to-do parts of the city, read to their pupils the following suggestions regarding a recreation room.

In very many of the unfinished attics a most delightful play room for children may be installed. People who intend to build homes can, at small additional expense, include such a room in their building plans. This is feasible in houses costing \$2,000.00 and upwards. In the larger homes such a room can be used not only for exercise, but also for private theatricals, recitals, dances, games, etc.

When an unused attic is available the following alterations will usually suffice:

If the house is heated by a furnace, place a large register in the floor of the attic over the hall. If by steam, introduce pipes the length of the attic near the eaves of the roof.

Hair felt, an inch thick, covered with sail cloth, makes a fine floor. It deadens sound and prevents accidents. The cloth should be painted with the rubber paint, used for running tracks, to render it durable.

Sail cloth may be used to cover the rafters, but hard pine is preferable. Further suggestions may be gleaned from the following description of an attic which, though used for a play room and gymnasium, also served as a dormitory for the boys. The heating apparatus procured an even distribution of heat and allowed of a temperature of 60 F. on a very cold day. Plenty of light was admitted through a large skylight, of opaque glass, on the north side of the room. Heavy wire screens, securely fastened, protected the windows from missiles, at the same



time preventing the younger members of the family from falling out while under the excitement of play. Small gratings, placed about the walls near the floor, gave place for the exit of foul air, while fresh air was introduced and directed upward in such a way that the occupants of the room were not subjected to draughts.

The girders, upon which the joists for the floor were placed, rested, at their ends and centers, upon rubber plates two inches thick, a foot long and as wide as the girders. This prevented vibration of the superstructure. The floor was laid over deadening material, and was of kiln dried rock maple.

Hard pine was used for the walls and ceiling of the room. The walls were constructed of ceiling five feet long, extending from the floor to the roof. The space between this and the eve of the roof was used for storage room. Pulley weight machines and other fixed apparatus were attached to the walls, thus leaving the main floor unobstructed. The ceiling extended from the top of the partition forming the walls, to the peak of the roof. Having in mind the rough usage to which the room would be subjected, the walls and ceiling received a dead finish as preferable to varnish.

A gable, excluded from the main room by curtains, formed a cot room for the boys. When they retired their cots were rolled into the main room. When they were made up in the morning they were returned to the gable. Papa's work bench, tool chest, lathes, etc., were placed in the other gable. This was separated from the main room by heavy wire screening. A wire door, the key to which papa always carried himself, gave admittance to the room. Here he taught Joe and Dick how to care for and how to use the tools.

In a small tower room the floor and walls were lined with cement. A partition through the center divided the room into two spaces, each one of which contained a bowl bath.

Thus, at small expense, were the accessories for exercise and recreation obtained.

The gymnastic apparatus included two chest weights with intercostal, paddle, rowing, wrist roll, back and loins, neck, ankle and foot attachments, abdominal mat and rowing slide, striking bag, medicine and basket balls. Racks, at the side of the room, contained light Indian clubs and dumb-bells. Portable apparatus, such as traveling and flying rings, bars, climbing ropes, etc., which were used in the play ground in the back yard during the summer, were used in this room during the winter. Goals, for basket ball, were placed at either end of the room. In addition the room contained implements for several other lively games.

#### GAMES.

Not only in the human, but in all young animals, there is an irrepressible instinct for play. A strong desire for free, joyous, unconventional movements. A generation ago it was called "goatishness" by the stern fathers. Within recent years it has received some quarter and now fathers and mothers watch with delight the games of the children.

In Germany games are much cultivated in the schools and in England the Earl of Meath fitted up play grounds for both boys and girls, placing them under good supervision. Cleveland, among other American cities, is following the example of the old country.

With the end in view of cultivating, along right lines, the play element, a few games are suggested as well as a few forms of athletics, which may be done in the school yards or upon adjacent pieces of vacant land. Under proper management considerable can be done during recess. The games or forms of athletics used should be simple, interesting and of such a character as to accommodate a large number of players on a small space of ground.



Where the school yards are not adapted to games, the leaders among the boys and girls can be told now and then how to play some game. They, in turn, can instruct their fellows and play on some vacant lot. It is popular with some teachers to take their schools on bicycle excursions and other outings. Some of the teachers obtain the good will and co-operation of their pupils by taking an interest in and directing their sports. Such guidance, on the other hand, is of great benefit to the children.

While girls cannot, under all circumstances at least, play all the games described, they may be regarded as boys, at least before puberty. It is a great pity that their physical freedom should be hampered at any time of life. Sift the matter thoroughly and one can find no real physiological, mental or moral ground for it. By the physical education which the Spartans gave their girls, they made mothers who maintained the state by giving birth to magnificent children.

#### BULL IN THE RING.

Any number of boys stand in a circle, hands tightly grasped. A boy, chosen as "bull," stands in the center of the ring. He challenges by crying "boo." Then all the boys in the ring cry "boo" and the bull makes a rush for some part of the circle and attempts to break through it. If he does not succeed, he has to take his station in the center and try it again. If he does, all pursue with great clatter, and the one who catches him has the honor of being "bull" in the next encounter.

#### COCK FIGHT.

Two boys fold their arms and, standing on one foot, hop up to each other and bunt shoulders. This is repeated, each one using all the skill he can to make the other lose his balance and touch the ground with both feet. The one keeping one foot off the ground the longest is victor. This may be played by two lines of boys in a manner similar to "Rush Line."

#### GIANT WRESTLE.

Since the wrestlers must lie on their backs this is usually performed on a floor or on the turf. Two or any number of boys lie on their backs—feet in opposite directions, shoulder to shoulder, arms locked. On 1, elevate the leg nearest your antagonist, or both legs if in a line, to the vertical; on 2, repeat; on 3, repeat, and at the moment the leg reaches the vertical, slip the heel back of the other fellow's and try to turn him over by a strong extension of the leg on the body. This is a good outing game.

The games mentioned require no apparatus, are simple, vigorous, amusing, can be played by large numbers and cultivate many physical qualities.

For instructions concerning the more highly specialized games, such as tennis, base ball, foot ball, golf, basket ball, basquette, badminton, polo, etc., one must consult the rules and directions furnished by the houses which carry sporting goods.

#### JUMPING.

Running high. Either jump stands or posts and a weighted cord are used or two boys can be elected to hold a cord against sticks or rods on which the height is marked in inches. A handkerchief should be placed upon the cord so that all may readily see it. The cord should be kept low enough so that all can readily jump it. The boys line up with a leader at the head. They follow, at a double quick, jumping as he sets the form.

Several forms are, straight over the cord, quarter and half turns to the right and left, running in from the sides at an acute angle to stands, springing off the leg furthest from the cord as first and then the other leg is thrown over. The running broad jump is best taught by placing two cords a foot or more above the ground and as far apart as the boys can conveniently jump them and gradually increasing the distance between the cords.



## SPRINT RUNNING.

The boys stand in line a foot or more apart. The left (right) toe is placed on a line drawn a few inches in front of the line of boys. Some boy who knows how runners "Set" shows them how to "Get set!" in the "standing," or "all fours" position. At a given signal they all start like a flash and run from twenty to two hundred and twenty yards. Short runs (with special practice in "setting" and starting) are much practiced in large gymnasia, and are most excellent forms of exercise. This is adaptable to most school yards.

## TUG.

This is a modified form of the tug of war. It is not so severe, is adapted to school boys and cultivates strength. A good sized (inch and a half) rope is stretched between two lines of boys, who stand facing each other and about four feet apart. At the command "Pull!" from the referee, every boy seizes the rope and pulls as hard as he can until the majority of those in one line are pulled to the opposite side from the original position of the rope. Then the referee shouts "Halt!" or "Hold!" or blows a whistle. At the signal all at once stop pulling, and the side which "pulled" the other is declared victor. Often it is decided in advance that "the best two out of three pulls" shall decide the fate of the day.

## SUPERVISION.

First of all the supervisors will expect to see the children take an *interest* in their work. This is shown by their *manner* rather than *anything* which may be *said* by the *teacher*. It is dependent upon her faithful and enthusiastic doing of her daily duty in gymnastics. It will be unnecessary and unwise for the supervisors to occupy as much of the time and attention of the schools as formerly in explaining and illustrating alphabetic positions and progression. The teachers are now able to do this themselves and they are requested not to ask them to give exercises or to ask to be excused, except in case of sickness. As a rule teachers who are too sick to give exercises by command are unfit for school room duties.

During the exercise period the supervisor will expect to see a sample of exercise under each of the ten varieties of the Progression indicated on page 18. One example in 4, 5 and 9 will be sufficient. Regular supervision and marking will begin with the second week of school. At any time a school may be asked questions concerning the neuro muscular qualities described in the Manual.

## NOTES ON THE PROGRESSION.

The Progression outlined is essentially that used in Swedish Educational Gymnastics. On account of the time limit a few modifications have been introduced. It is of the utmost importance that teachers should have a thorough working knowledge of the Day's Order and that they should be able to improvise exercises in accordance with the outline on page 18. While it is allowable to use the series printed in the manual no teacher should consider herself successful in any large measure until she can readily compose series of exercises similar to those on page 19 and at the same time maintain the enthusiastic interest of her pupils during the exercise period. This the majority of our teachers now accomplish.

"The Progression embodies three great laws of alternation in movement." By strict adherence to the outline given teachers save much time. Teachers should continually ask themselves—"What am I trying to do under this number? What should I accomplish under the next number?" Above all they should not tell the supervisors that they can not remember the order. This is at once a needless confession that they are ignorant of an important part of their work, for should a teacher thus blunder about in the dark it will instantly appear.



## GENERAL INSTRUCTIONS.

Alphabetic positions are taken just as shown in the cuts. A command usually consists of two words. The first prepares the mind for action, the second (followed by the exclamation point) tells exactly *when* to act. A succession of periods ( . . . ) means to hold the position for a few seconds before going to the next exercise. Usually hints to the teacher are placed in parenthesis. L. R. F. B. means left, right, forward, backward, alternate. The time allowed for gymnastics in all grades is ten minutes a day.

### Outline of Progression or Day's Order Used in All Grades in the Cleveland Public Schools.

	Approximate time in seconds	Rate of move- ment.	Variety.	Characteristics of the Exercises Under Each Number of the Progression.
1.	30	Varied.	Order Move- ment.	In No. 1 a number of commands are given (usually alphabetic positions), to secure attention, recreate the school and prepare it for subsequent exercises.
2.	60	Slow.	Slow stretching. Posture.	Eight to twelve slight backward or forward bending movements, executed slowly and usually by command with firms or crosses.
3.	60	Slow.	Breathing.	Six to eight slow, deep, full inspirations and expira- tions. Simple arm exercises, gracefully executed, usu- ally accompany and assist in the breathing exercises.
4.	30	Fast and Slow.	Muscular control and gracefulness.	Usually toe standing balancing exercises by command. When the school is balancing in one position some command transfers it slowly to some similar position.
5.	100	Slow to Fast.	Carriage.	Rapid vigorous firms or crosses, usually with walks. This number exercises vigorously the muscles of the arms, shoulders and upper back and chest. Beginning with medium rate of movement the movement gradually becomes more rapid, in the meantime main- taining the precise form of the exercise given.
6.	30	Slow.	Posture.	As in 2 several slow, slight, backward or forw. bends. In 2 and 6 emphasis is placed upon the strength and gracefulness in the execution of the movement.
7.	110	Medium to fast to slow.	Carriage. L. (R.) bending and twisting.	Lateral trunk bending and twisting. First with move- ment as in 5 with counts. Then with counts for the bending and twisting together with other alphabetic positions by command.
8.	60	Slow.	Breathing.	Firms or crosses are executed by command while em- phasis is laid upon the process of respiration, espec- ally costal breathing. The lungs are thoroughly pre- pared for No. 9.
9.	100	Medium to fast.	Carriage and endurance.	Firms or crosses are executed as in 5 together with such springing movements as the knee bends, fall outs and half crook. The rate of movement is from me- dium to rapid as in 5. Counts 24 to 40.
10.	50	Slow.	Breathing.	As in 3 or 8. Add a few order movements if school is warm. Again pay attention to the ventilation.



## A Ten Minute Day's Order for Grammar Grade Children.

Illustrating the Outline on the Opposite Page.

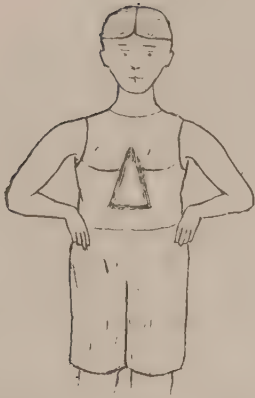
1. Attention! Stand! Cross c!..Sit!..Cross a!x!q!c!e!c!e!c!e!c! Stand!  
Neck firm! Fall out c!..a! Half crook!..Cross c! Knee bend! Position!
2. Neck firm, backw. bend, 1! 2, 3. Position, 1! 2, 3. (12 to 16 waltz measures.)  
Sit! Cross c! Backw. stretch!....d!..Stand!
3. Cross a-c, breathe in, 1!....Out!..In!..Out!..Stretch in!..Out!..Ect.
4. Cross c! Half crook!..Heel raise!....Change feet!....Knee bend!....  
Stretch!....Touch!....Feet change!....Slowly L. Bend!..Position!
5. (Counts, 30 to 40.) Cross a, walk a, 1! Position, 2! (1!2!1!2!1!2! Ect.)  
Cross c, walk e, 1! Position, 2! "
6. Backw. bend!..Knees bend!..Knees stretch!....Forw. bend!....Neck firm!....Heads up!..Cross c!....Stretch!..Left, upw. stretch!..Arms change! Position!
7. (Counts, 30 to 40.) Cross c, walk e, L. (R.) bend, 1! Position, 2! (1!2! Ect.)  
L. (R.) bend, 1!..c!..d!..Position, 2!..1!2!1!2!1!e!a!..c!..2!..Ect.  
(Counts, 30 to 40.) Chest firm, knees bend, L. (R.) twist, 1! Position, 2!  
L. (R.) twist, 1! cross c! a! Position, 2!..1! d!..a!..2! c!..1!2!1!2!
8. Neck firm! Breathe in!....Head firm! Out!....Repeat! In!....Out!  
....In!....Out!....Cross c! In!....Knees bend! Out!....Again, In!  
....Out!..In!..Ect.
9. (Counts, 30 to 40.) Cross c, half crook, 1! Position, 2! (1!2!1!2! Ect.)  
Cross b, fall out b, 1! Position, 2! (1!2!1!2! Ect.)  
" (Alternate lines take first, other lines second exercise.)
10. Cross e-c, breathe in!....Down and out!....(Repeat several times.)  
Forward four paces, march!....Backw. eight paces, march!.....For-  
ward, four paces, march!....Sit! Stretch touch, Breathe in!....C and  
down, Out!..In!..Position!

## A Ten Minute Day's Order for Primary Children.

Illustrating the Outline on the Opposite Page.

1. Attention! Cross a!c!a!c. Upw. stretch! Hands clap! Chest firm!..  
Rise! Walk b!e!..b!..e!..a!..Cross c!..Hips firm!..Heads up!..Knees bend!  
Upw. stretch!..Fingers touch!..Knees stretch! Neck firm! Position!
2. Chest firm! Backward bend!....Cross c!..Stretch!..Position!
3. Cross c! Breathe in!....Hips firm! Breathe out!....(Repeat several times.)  
Cross a-c, breathe in, 1!.....Arms downward to position, breathe out, 2!Ect.
4. Heels lift!....L. arm upward stretch! Quickly, arms change! Heels sink!....
5. (Counts, 30 to 40.) Cross a, 1! Position, 2! (1!2!1!2!1!2!1!2! Ect.)  
Cross c, 1! Position, 2! "
6. Neck firm!..Forw. bend! Heads up! Eyes front! Backw. bend!..  
Cross a!..c! Stretch the c!....e!..b!..a!..Backw. bend, Position!
7. (Counts, 30 to 40.) Cross a, L. (R.) bend, 1! Position, 2! (1!2!1!2!1!2! Ect.)  
L. (R.) bend, 1! cross a!..c!..Position, 2! e!..b!..1!..c!..2!..a!..  
1!..e!..c!..2!..1!..2!..1!..Chest firm!..2!..Stretch touch!..Position!  
(Counts, 30 to 40.) Neck firm, L. (R.) twist, 1! Position, 2! (1!2!1!2! Ect.)  
L. (R.) twist, 1! cross e!..Position, 2!..1! Chest firm!....a!....2! c!  
....e!..1!....Neck firm!....2!..1!..2....1!....a! e! b!....Position!
8. Waist firm! Breathe in!....Push in, breathe out!....(Repeat 12 times.)
9. (Counts, 30 to 40.) Cross c, half crook, 1! Position, 2! (1!2!1!2! Ect.)  
Cross e, knees bend, 1! Position, 2! "
10. Cross a-c, breathe in, 1!.....To position, out 2!.....Again, in, 1!....  
Out!....a-d, in!....Out!..In!....Ect. Sit! Cross a!..c!..Position!

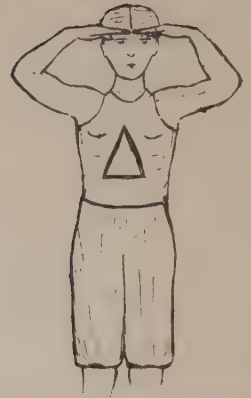




Hips Firm. (Wing-standing.)



Position. (Fundamental.)



Head Firm. (Think-standing.)



Backward Bend.



L. (R.) Bend.



Knees Bend.  
(Toe-knee-bend-standing.)

## EXERCISES FOR THE FIRST GRADE.

### I.

1. (Active sitting position.) Show cuts of alphabetics, and then take head (think) firm. Have children do the same. Then hips firm and have children imitate. When they take each position correctly, command hips firm!....Head firm!....Then show backward bend. Practice in the seats.
2. To the right, stand!....Sit!....Again stand! Backward bend!....Position!
3. Take a deep breath. Fill the chest full! Breathe out!....In!!....ect. (See progression, page 18. Let the children immitate you in taking the deep breathing as in all other exercises.)
4. Knees bend!....Having gotten the children in the position command—hips firm!....(correct form.) Head firm!....Backward bend!....Position!
5. (Counts, 20 to 30.) Head firm, 1! Hips firm, 2! 1! 2! 1! 2! 1! 2! etc. (See progression page 18 for form in No. 5.)
6. Hips firm!....Backward bend!....Take a good stretch! Position!
7. L. (R.) bend, 1! Position, 2! (Counts, 20 to 30.) 1! 2! 1! 2! 1! 2! 1! 2! etc. (See form of No. 7 on page 18.)
8. Repeat breathing exercises in 3.
9. (Counts, 20 to 30.) Knees bend, 1! Position, 2! 1! 2! 1! 2! 1! 2! 1! 2! etc.
10. Repeat breathing exercises in 3. Also take—head firm! Hips firm! Sit!

Note.—In teaching the alphabetic positions strive to enter into it as you would into the playing of a game. Many teachers have made this work entirely too laborious.





Forward Reach.



Upward Stretch.



Neck Firm. (Rest-standing.)

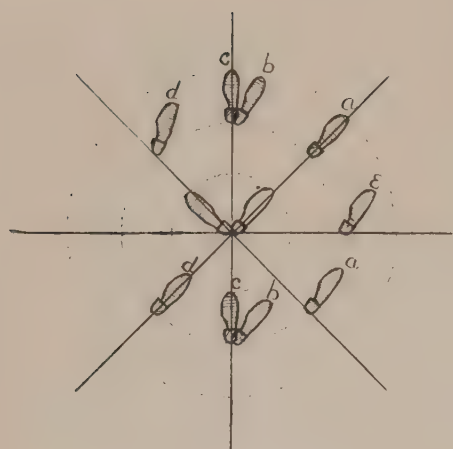
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1. (Show cut of forward reach, upward stretch and neck firm, and take the positions with the children.) Command—forward reach!...Upward stretch! Neck firm!..Head firm!...Hips firm!..Stand!...Sit! firm!...
2. Backward bend!..Take a good stretch!...Again!..Upward stretch! Stand!
3. Fill the lungs! Breathe in!...Hands outward and downward, breathe out!...(repeat several times.)
4. Knees bend!...Repeat 4 in set 1.
5. Upward stretch, 1! Position, 2! (Count as in No. 5, page 18.)
6. Sit! Upward stretch!..Backward bend!..Neck firm!..Head firm!..Stand!
7. (See progression, page 18.) L. (R.) bend, 1! Position, 2! (1! 2! 1! 2! etc.)  
                   “                  “                  twist, 1!                  “                  “                  “
8. Repeat breathing exercises under 3.
9. Neck firm! Knees bend, 1! Position, neck firm, 2!(See counting on page 18.)
10. Head firm, breathe in!...Neck firm, breathe out!...(Repeat several times.)

3.

1. Attention! Hips firm!...Head firm!...Neck firm!...Upward stretch! ...Forward reach!... Neck firm!..Left bend!..Right bend!...
2. Backward bend!...Upward stretch!..Stretch high!...Hands clap!... Stand!
3. Breathing exercise as in 3, set 2.
4. Upward stretch! Fingers touch!..Knees bend!...Head firm!..Knees stretch!
5. Counts! Neck firm, 1! Upward stretch, 2! 1! 2! etc.
6. Hips firm!..Backward bend!..Head firm!..Neck firm! Backward bend!
7. Counts! Hips firm! L. (R.) bend, 1! Position, 2! (1! 2! 1! 2! etc.)  
                   “                  “                  twist, “                  “                  “
8. Hips firm! Breathe in!...Breathe out!...In!..Fill the lungs!...Out!.. In!...Out!...In! Sit!..Head firm!..Neck firm! Hips firm! Sit! Stand!
9. Counts! Upward stretch, 1! Knees bend, 2! (1! 2! 1! 2! etc.)
10. Repeat 10, set 2. Sit!...Upward stretch! Neck firm!...Sit!





Walks—**a, b, c, d, e.**  
(Right Leg, Forward and Backward.)



Walk Form.  
(Walk b.)



Toe Stand.  
(Heels Raise.)



### Forward Bend.

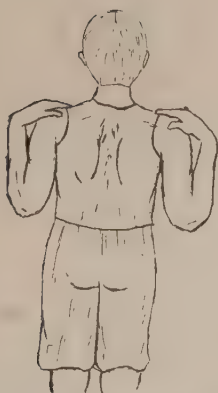
4.

1. Attention!... Stand!... Right foot, walk a!... b!... c!... d!... e!...  
Feet change! Left foot, walk a!... b!... c!... d!... e!...  
(Line up the children in two or three lines in front of seats and desks. Show  
them the cuts and then try for the positions.)
2. Neck firm! Backward (6 times), stretch!
3. Thorough breathing exercises as in 3—set 1.
4. Walk a!... Toe stand!... Change feet!... Heels lift!... Heels sink!
5. Counts! Forward reach, neck firm, 1! Position, 2! 1! 2! ect.
6. Sit! Upward stretch! Hand over hand rope climb!... Stand!
7. Hips firm! Walk e! Counts! L. (R.) bend, 1! Position body, 2! (1! 2! 1! 2! Ect.)  
“ “ “ “ “ “ “ “ twist, “ “ “ “ “ “ “ “
8. Breathe in!... Upward stretch! Breathe deeper!... Arms outward and  
downward, breathe out! (Repeat six or eight times very thoroughly.)
9. Walk e! Counts! Knees bend, 1! Walk e position, 2! 1! 2! 1! 2! ect.
10. Repeat breathing exercise in 8. Repeat walks.

## 5.

1. Review walks as in 1—set 4.
2. Neck firm!....Backward bend!....Forward bend!....Backward bend!  
Position!
3. Walk e! Breathe in!....Out!....In!....Out!....Hips firm! In!....
4. Walk e! Knees bend! ....Stretch! ....Slowly bend! ....Stretch!....  
Position!
5. Counts, forward reach, hips firm, 1! Position, 2! 1! 2! 1! 2! ect.
6. Knees bend!....Backward bend!....Forward bend!....Heads up!....
7. Hips firm! Walk e! Counts! L. (R.) bend, 1! Position body, 2! 1! 2! 1! 2! ect.  
“ “ “ twist, “ “ “ “
8. Deep breathing as in 8—set 4.
9. Walk a!....Counts! Knees bend on 1! Walk a on 2! 1! 2! 1! 2! etc.
10. Walk e! Breathe in!....Walk b!....Breathe out!....Change feet!....  
Breathe in!....Out!....Walk e!....Breathe in!....Out!....In!....





Chest Firm (Bend-standing.)



Half Crook.

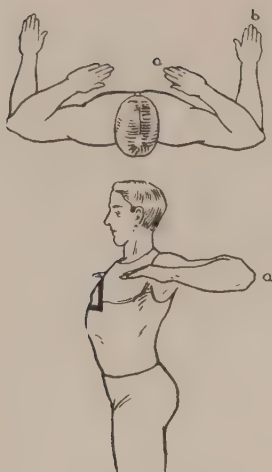
## 6.

1. Stand!....Walk e!....b!....e!....a!....Position! Left foot, walk e!... b!....e!....a!....Head firm!....Feet change!....Feet change! Position!
2. Chest firm!....Backward bend!....Neck firm!...Chest firm!....Position!
3. Deep breathing as in 3—set 5.
4. Half crook!....Legs change!....Position!
5. Counts, forward reach, chest firm, 1! Position, 2! 1! 2! 1! 2! 1! 2! ect.
6. Chest firm backward bend, 1! Position, 2! (Execute several times slowly.)
7. Counts! Chest firm, L. (R.) bend, 1! Position, 2! (1! 2! 1! 2! Ect.)  
                   “                  “                  twist, “                  “                  “                  “
8. Deep breathing as in 8—set 4.
9. Counts! L. (R.) alternate, half crook, 1! Position, 2! (1! 2! 1! 2! Ect.)
10. Breathing exercises as in 10—set 5.

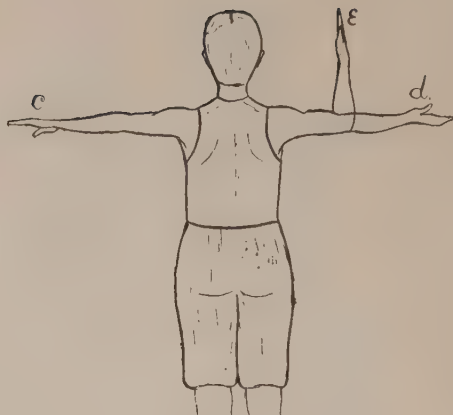
## 7.

1. Attention!....Stand!....Heels lift!....Heels sink!....(Repeat slowly several times.) Half crook!....Legs change!....Change!....Position!
2. Chest firm!....Backward bend!....Heels lift!....Position!
3. Breathing exercises as in 3—set 5.
4. Heels lift (toe stand)!....Heels sink!....Lift!....Upward stretch!.... Neck firm! Heels up!....Walk e!....Heels up!....Feet change!.... Position.
5. Counts! Chest firm, 1! Upward stretch, 2! 1! 2! 1! 2! ect.
6. Backward bend!....Chest firm!....Neck firm!....Backward stretch!
7. Counts! Chest firm! Walk e, L. (R.) bend, 1! Chest firm, position 2! (1! 2! 1! 2! ect.)  
       Counts! Chest firm! Walk e, L. (R.) twist, 1! Chest firm, position, 2! 1! 2! ect.
8. Neck firm! Breathe in!....Chest firm! Breathe out!....(Repeat.)
9. Toe stand! Counts! Knees bend, 1! Toe stand, 2! 1! 2! 1! 2! ect.
10. Deep breathing exercises as in 10—set 5.





Cross—a and b.



Cross—c, d, e.

8.

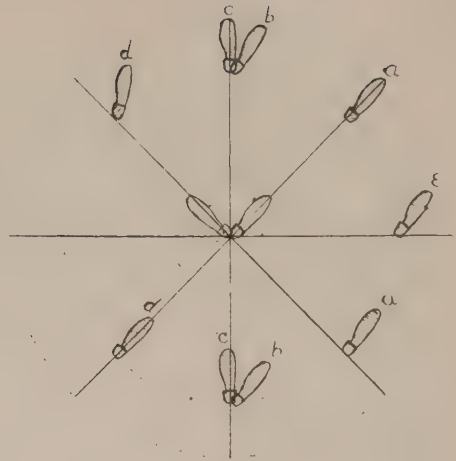
1. (Show cuts and command.) Cross a!—(Then take the position.) Cross b! ....c!....d!....e!....(Show the gesture which includes crosses, a, b, c, d and e. Practice them, first with one arm, then with the other, then both. Suggest, with a smile, that cross a-b-c-d-e is the name of a cross dog which bites if you don't treat him just right.
2. Cross a!....Backward bend!....Cross c!....Forward bend!....Position!
3. Slowly, cross c, breathe in!....Position, breathe out! (Repeat several times.)
4. Heels lift! Cross d!....Heels sink!....Keep the d! Heels lift! Position!
5. Counts! Cross e, 1! Cross c, 2! 1! 2! 1! 2! ect.
6. Cross b!....Backward bend!....Cross a!....Forward bend!....Position!
7. Counts! L. (R.) bend on 1! Cross c, 2! 1! 2! 1! 2! ect.  
                   " twist " " " " " " " " " " " "
8. Neck firm! Breathe in!....Cross c! Breathe out! (Repeat 6 or 8 times.)
9. Counts! Half crook, 1! Position, 2! 1! 2! 1! 2! ect.
10. Cross a-c, breathe in!....Position, out!....(Repeat 6 to 10 times.)

## EXERCISES FOR SECOND GRADE.

9.

Note.—During the first two months of the first term review sets 4, 5, 6, 7 and 8.

1. Attention! Cross a! e! x! b! d! Upward stretch! Touch! Stand! Walk e! d! e! feet change!....Hips firm! Walk a! Toe stand! Walk c! d! e! b! Position!
2. Sit. Eyes close! Neck firm!....Stand!..Backward bend!....Eyes open!
3. Deep breathing as in 3—set 8.
4. Hips firm! Half crook!....Quickly, legs change!....Change!..Position!
5. Counts! (See 5, page 18.) Cross a, 1! Cross c, 2! 1! 2! 1! 2! ect.
6. " Very slowly " " " " " " " " " " " " (With slight backw. bend.)
7. Counts! (See prog., page 18.) L. (R.) bend, cross a, 1! Position, 2! 1! 2! ect.  
                   " " " twist " " " " " " " " " " " "
8. Deep breathing as in 8—set 8.
9. Counts! Cross c, half crooks, 1! Position, 2! 1! 2! ect. (See progression.)
10. Deep breathing exercise as in 10—set 8.



10.

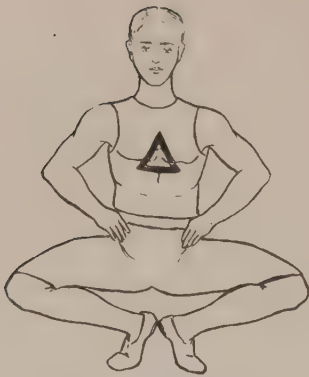
1. Attention! Upw.stretch! Neck firm! Cross c! Stand! With c!
  2. Backward stretch!...Neck firm!...Forward bend!...Heads up! Knees bend!  
Backward bend!...Cross c!...d!...a!...Position!
  3. Give special attention to deep breathing as in 3—set 8.
  4. Cross c!...Half crook!...Hold the crook..Upward stretch!..Touch!....  
Change feet!...Notice form!....Neck firm!....Change feet!..Position!
  5. (Counts, 20 to 30.) Stretch touch, 1! Cross c, 2! 1! 2! 1! 2! ect.
  6. Repeat 5 very slowly and gracefully.
  7. (Counts, 20 to 30.) L. (R.) bend, cross c, 1! Position, 2! 1! 2! 1! 2! ect.  

“	“	“	“	“	1! 2! 1! cross a! c! 2! a! 1! e! 2! ect.
“	“	“	“	“	twist, cross a, 1! Position, 2! 1! 2! 1! 2! ect.
“	“	“	“	“	1! 2! Cross e! 1! a! 2! 1! b! a! 2! ect.
- (See progression, page 18.)
8. Deep breathing as in 8—set 8.
  9. Counts! Cross a-c, half crook, 1! Position, 2! 1! 2! 1! 2! ect.
  10. Deep breathing as in 16—set 8. (Show fallout cuts and try positions.)

## II.

1. Attention! Stand!...Walk b! Fallout b!...a!...Legs change!...Chest firm!...Fallout c! b!...d!...Legs change!...a!..b!..c!..Position! Left face!..Fallout e!...legs change!...Position!..Right face!
2. Fallout b! Cross c! Backward bend!..Neck firm! Change legs! Position!
3. Deep breathing as in 3—set 8.
4. Fallout c!...Heels raise!...Sink!...Raise!..Legs change!..Position!
5. Counts! Cross c, 1! Position, 2! 1! 2! 1! 2! ect.
6. Right face! Fallout e!..Neck firm! Forward bend!..Position! Left face!
7. Repeat 7—set 10.
8. Repeat 8—set 8.
9. Hips firm! Counts! Toe stand, fallout a, 1! Position, 2! 1! 2! 1! 2! ect. (Left, right, forward, backward alternately, 24 to 32 counts.)
10. Breathing exercises as in 10—set 8. By command, fallout a! b!...c!...d!...legs change!...c!...b!...a!...Backward, b! .. a!.. Position! (If may be begin the practice of the fallouts in the hall. This will enable the teacher to see what the pupils actually do.)





Knees Deep Bend.  
(Toe-knee-deep-bend-standing.)



Reach stoop-stand.

## 12.

1. Stand! (show cuts.) Fallout a! b!...d! Legs change!..Fallout b!...a!..c!..(Show cut.) Knees deep bend!...Knees stretch!..Bend! Stretch!
2. (Show cut.) Stretch stoop stand!...Backw. bend!..Stretch stoop stand!..Upward stretch!...Cross c!..Backward bend! Position!
3. Breathe in!..Out!..Cross a-c, breathe in!..Out!..(Repeat several times.)
4. Deep knees bend!..Knees bend!..Deep knees bend! Cross c! Position!
5. (Counts, 20-30.) Cross c, walk e, 1! Position, 2! 1! 2! 1! 2! ect.
6. Sit! Backward bend! Cross c! Stand! Reach stoop stand!...Position!
7. (Counts, 20-30.) L. (R.) bend, cross a, 1! Position, 2! 1! 2! 1! 2! ect.  
     "       "       "       "       1! Cross c!..a!..2!..1!..c!..2!.. Position!  
     "       "       "       "       twist cross b, 1! Position, 2! 1! 2 1! 2! ect.  
     "       "       "       "       1! Neck firm! 2! 1! 2! a! b! 1! 2! Position!
8. Stretch stoop stand! Breathe out! Upward stretch! Breathe in! (Repeat.)
9. (Counts, 20-30.) Knees deep bend, 1! Position, 2! 1! 2! 1! 2! ect.
10. A-c, breathe in!..Position, out! (Repeat 8 or 10 times.)

## 13.

1. Cross c! Upw. clap! Again!..Stand! Hips firm! Left face! Sideward, fall-out, e!...Legs change!...Legs change!..Position! Right face!
2. Reach stoop stand!..Knees straight!..Neck firm!..Backw. bend! Position!
3. Breathing as in 3—set 12.
4. Knees deep bend!..Stretch!..Touch!..Left bend!..Right bend! Position!
5. (Counts, 20-30.) Upward touch, 1! Cross c, 2! 1!2!1!2!etc.
6. Fallout b! Cross c! Backward bend!..Neck firm!..Forward bend! Position!
7. Repeat 7 in set 12.
8. " 8 " "
9. (Counts, 20-30.) Left face! Hips firm! Fallout e, 1! Position, 2! 1! 2! 1! 2! ect.
10. Repeat 10—set 12.

14.

1. Cross c!d!c!d!c!d! Forward clap! Upward touch! Stand! Sit! Stand!
2. Neck firm! Backward bend! Upward touch, stretch! Fallout a! Position!
3. Breathing as in 3—set 12. (Execute thoroughly.)
4. Fallout c! Heels raise! Heels sink! Raise! Legs change!..Position!
5. (Counts, 20-30.) Neck firm, 1! Stretch, touch, 2! 1! 2! 1! 2! ect.
6. Sit! Neck firm! Backward bend! Stretch to cross c!...Stand!
7. (Counts, 20-30.) L. (R.) bend, cross a-e, 1! Position, 2! 1! 2! 1! 2! ect.  
     " " " " twist, cross e, " " " " "  
     " " bend, 1! 2! 1! a! 2! c! 1! e! 2! c! Position!  
     " " twist, 1! 2! 1! b!..2!..1!..a!..e!..2!..2!..Position!
8. Waist firm! Breathe in!...Push in! Breathe out! (6-8 times.)
9. (Counts, 20-30.) Hips firm! Fallout a, 1! Position, 2! 1! 2! 1! 2! ect.  
     (Execute left, right, forward, backward.)
10. Cross a-d, breathe in! Position, out! (Repeat, gracefully, 8-10 times.)

15.

1. Cross c!..Forward clap, 1! Upward clap, 2! 1! 2! 1! 2! Chest firm! Stand!
2. Knees deep bend! Cross c! d! Slightly backw. bend! Knees stretch! Position!
3. Thorough breathing exercises as in 3—set 12.
4. Left face! Cross c! Fall. e! Heels raise! L. bend! Floor touch! Stand! R. face!
5. (Counts, 20-30.) Alternate lines cross c, 1! Neck firm, 2! 1! 2! 1! 2! ect.  
     Other lines neck firm, 1! Cross c, 2! "
6. Execute 5 rather slowly with a slight backward bend on 1!
7. Repeat 7—set 14.
8. Repeat 8—set 14.
9. (Counts, 20-30. L. R. F. B.) Fallout b, 1! Position, 2! 1! 2! 1! 2! ect.
10. Repeat 10—set 14.

## EXERCISES FOR THE THIRD GRADE.

16.

(At the beginning of the year review sets 12, 13, 14 and 15.)

1. Neck firm!..Head firm!..Chest firm! Stand! Walk a!..e!..d!..Position!
  2. Sit!..Neck firm! Backward bend!....Cross e!..Neck firm!..Position!
  3. Stand!..(Gracefully,) upward stretch, touch, breathe in! Chest firm, out!  
     (With slow, graceful movement and deep breathing repeat 6-8 times.)
  4. Stretch touch! Heels raise!..Heels together! L. bend!..R. bend! Position!
  5. (Counts, 20-30.) Neck firm, 1! Cross c to position, 2! 1! 2! 1! 2! ect.
  6. Chest firm!..Backward bend!..Forw. bend!..Heads up! Cross a! Position!
  7. (Counts, 20-30.) Walk e, L. (R.) bend, 1! Position, 2! 1! 2! 1! 2! ect.  
     " " Chest firm, L. (R.) twist, 1! Position, 2! "  
     L. (R.) bend, 1! 2! 1! c! a! 2! d! 1! 2! Neck firm! 1! 2! 1! c! 2! 1! 2!  
     " " twist, 1! e!...2! a!..1!..Chest firm!..2! 1! 2! b!..1!..1!..2! Position!
  8. Waist firm, breathe in!...Push in breathe out!..(Repeat 6-8 times.)
  9. (Counts, 20-30.) Stretch, touch, deep knees bend, 1! Position, 2! 1! 2! ect.
  10. Cross b-d, breathe in!...Position, out!....(6-8 times, graceful gesture.)
- Note.—For rate of movement and other instructions regarding these sets of exercises see Progression, page 18.



17.

1. Cross e!..b!..d!..a!..Chest firm!..d!..Upward clap!..Stand!
2. Fallout b! Neck firm!..Backward bend!....Coss d!....Position!
3. Through cross a-d breathe in!....Arms down, out! (Repeat 6-10 times with graceful gesture and with full inspiration and expiration.)
4. Half crook! Cross c!..Left bend!..Slowly, right bend!....Position!
5. (Counts, 20-32.) Upward stretch, clap, 1! Cross c, 2! 1! 2! 1! 2! ect.
6. Backward fallout c!..Backward bend!..Cross c!..d!..a!..Position!
7. (Counts, 20-32.) L. (R.) bend, 1! Position, 2! 1! 2! 1! 2! ect.  
L. (R.) bend, 1! 2! 1! Neck firm! 2! 1! 2! a!..1!..c!..2!..d! 1!..e! a! 2!1!2!  
(Counts, 20-32.) Chest firm, L. (R.) twist, 1! Position, 2! 1! 2! 1! 2! ect.  
L. (R.) twist 1!..2!..1!..Stretch touch!..2! 1!..e!..a!..2!..1!..2!
8. Cross c! Breathe in! Fill the lungs!..Waist firm! Push in, breathe out!....  
(Repeat thoroughly, 8-10 times.)
9. (Counts, 20-32.) Half crook, 1! Position, 2! 1!2!1!2! ect. (L.R.L.R.ect.)
10. Stretch, touch, breathe in!..Arms outward downward breathe out!..  
(With graceful movement of arms and deep, full inspiration and expiration repeat 8-10 times. Observe ventilation.)

18.

1. Stand! Deep knees bend!....Fallout c!....Legs change!....Position!
2. Half crook!....Neck firm! Backward bend!....Legs change!..Position!
3. Repeat 3—set 17.
4. " 2—18.
5. (Counts, 20-32.) Cross a-c, 1! Position, 2! 1! 2! 1! 2! ect.
6. Right face!....Fallout e! Neck firm! Backward bend!..Position! L. face!
7. (Repeat 7—set 17.)
8. " 8 " "
9. (Counts, 20-32.) Half crook coss c, 1! Position, 2! 1! 2! 1! 2! ect.
10. (Repeat 10—set 17.)

19.

1. Stand! Walk e!..a!..b!..d!..Backward, d!..a!..Legs change!..d!..a!
2. Heels raise!..Backward bend!..Forward bend!..Eyes front!..Position!
3. (Repeat 3—set 17.)
4. Heels together! Heels raise!....Cross e! Left bend!..R. bend! Position!
5. (Counts, 20-32.) Cross c walk e, 1! Position, 2! 1! 2! 1! 2! ect.
6. (Repeat 5 slowly, using waltz time—1! 2, 3. 1! 2, 3. ect.)
7. (Repeat 7—set 17.)
8. " 8 " "
9. (Counts, 20-30.) Walk e knees bend, 1! Position, 2! 1! 2! 1! 2! etc.
10. (Repeat 10—set 17.)

20.

1. Stand!...Heels together! Heels raise!...Sink!...Walk c!..b!..a!..e!..d!...Backward, d!...a!...b!..Legs change!..d!..a!..e!..Position!
3. Stand! Cross c breathe in! C to position, out! (Repeat, gracefully, 6-8 times, emphasizing graceful movement and full deep respiration.)
4. Cross c! Heels together!..Heels raise!..Knees bend!..Knees stretch!
5. (Counts, 20-30.) Cross c walk e, 1! Upward stretch, clap, 2! 1! 2! 1! 2! ect.
6. Hips firm! Forw. bend!..Heads up! Eyes front! Backward bend!..Position!
7. (Counts, 20-30.) L. (R.) bend, cross a-e, 1! Position, 2! 1! 2! 1! 2! ect.  
L. (R.) bend, 1! 2! 1!..c!..2! a! 1!...e!..d!..2!..c! 1!..b!..Position!  
(Counts, 20-30.) L. (R.) twist, cross a, 1! Position, 2! 1! 2! 1! 2! ect.  
L. (R.) twist, 1!..a!..2!..1!..e!..b!..2! 1!..Neck firm!...Position!
8. Neck firm! Breathe in!...Cross d! Breathe out!  
(Observe ventilation and repeat breathing thoroughly 6-8 times.)
9. (Counts, 20-32.) Cross c, knees bend, 1! Position, 2! 1! 2! 1! 2! ect.
10. Neck firm, cross c, breathe in!—Arms down, out!  
(Slowly, gracefully, thoroughly. Notice ventilation.)

21.

1. Cross a!...Rise!...Knees bend!..Fallout d!..Legs change!...Position!
2. Left upward stretch!..Arms change! Climb, 1! 2! 1! 2! ect.
3. (Repeat 3—set 20.)
4. Half crook!..Knee clasp!..Knee bend!..Stretch!..Legs change! (Repeat.)
5. (Counts, 20-32.) Alternate lines, cross c, 1! Neck firm, 2! 1! 2! 1! 2! ect.  
“ “ Other lines, neck firm, 1! Cross c, 2! “
6. Cross a-d, backw. bend, 1! 2, 3. Position, 1! 2, 3. (Repeat slowly 4-6 times.)
7. Repeat 7—set 20.
8. Repeat 8—set 20.
9. (Counts, 20-32.) Cross c, knees bend, 1! Upward clap, 2! 1! 2! 1! 2! ect.  
(Alternate lines clap on 1! The other lines on 2!)
10. (Repeat 10—set 20.)

22.

1. Stand! Upward clap! Cross c! d! c! d! c! d! 1! 2! 1! 2! 1! 2! 1! 2! 1! 2!  
Cross a! x! p! o! c! q! a! Walk e! Half crook! Legs change! Position!
2. Forward lean! Bodies straight! Hips firm! Shoulders backward roll! Stand!
3. (Repeat 3—set 20. Fill the lungs full at each inspiration.)
4. Hips firm! Half crook! Slowly left twist!...Right twist!...Position!
5. (Counts, 20-32.) Alternate lines cross a, walk a, 1! Position, 2! 1! 2! 1! 2! etc.  
“ “ Other “ “ c, walk e, “ “ “ “
- (Change exercises and repeat.)
6. Slowly, forw. bend, 1! Backw. bend, 2! 1!...2!...c! 1!..b!..2!..Position!
7. (Repeat 7—set 20. Give each movement thoroughly.)
8. (Repeat 8—set 8.)
9. (Counts, 20-32.) Alternate lines, cross c, knees bend, 1! Position, 2! 1! 2! ect.  
“ “ Other “ “ a half crook, “ “ “ “
10. Repeat 10—set 20.) Heads up! Four paces, forward march!...Halt!  
Backward march!...Halt!..Sit! Cross a!..c!..Upward clap! Sit!



## EXERCISES FOR THE FOURTH GRADE.

### I.

1. Attention! Gymnastics! Active sitting position! Cross d! Hands above head, clap! In front, clap! Grip! Shake! Hips firm! Stand! Quietly, sit! Cross a! Strong! Chest firm! Firmer! L. cross c! Change hands! (As quietly as mice), rise Hips firm! Heads up! Bodies straight! Forward lean! R. dress!...Heads up!..Eyes right!.. Front! L. dress!..Front! Walk e! (Carefully, accurately), a! Backw., d! Heads up! (Is the step right?). Change feet!...Chest firm! Firmer! Half crook! Knee up, toe pointing downward! (Is it right?). Change feet! ....Cross c! a!...Walk e! Fallout b! Toe stand! Change feet!.. Backw., walk a!..d!..c!..Position!  
(During the first two weeks exact the utmost accuracy in alphabetic work).
2. Counts! Cross c. walk b, backw. bend, 1! Position, 2! (1!2!Ect.)  
(Four *slight* bends with *strong, slow, c's*).
3. (Gracefully), cross c, breathe in!...Position, out!...In!..Ect.
4. Heels raise! Upw. stretch! Fingers touch! Backw. bend! Heels up! Hold it!...Half crook! Cross c! L bend!..R bend!..Position!
5. (Counts, 30 to 40.) Cross a, 1! Position, 2! (1!2!1!2!1!2!1!2! Ect.)  

“	“	“	“	“	“

 walk a, 1!  
 (Begin slowly in good form and increase gradually to rapid movement.)
6. Chest firm! Firmer! Forward bend!...Heads up! Eyes front! Walk e! Backw. bend! Cross c! Stretch the c!...Cross a! Strong! Forward bend!..Position!
7. (Counts, 30 to 40.) Hips firm! L. (R.) bend, 1! Position, 2! (1!2! Ect.)  
 (Counts, 30 to 40.) Cross a! L. (R.) twist 1! Position, 2! (1! 2! Ect.)  
 L. bend, 1! Cross a! 2! R. bend, 1! Cross c! 2! 1! Walk b! 2! Chest firm 1! 2! Cross a! L. R. twist, 1! 2! 1! 2! Cross e! 1! b! 2! Hips firm! 1! Walk e! 2! 1! Change feet! 2! Position!
8. Cross a! Walk a! Breathe in!...Out!...Cross c! Fill the lungs! Full! Walk e! Breathe out! In!..Out!..In!..Out!..Waist firm! Breathe in!...Out!..In!..Position!
9. Hips firm! Knees bend, 1! Position, 2! (1! 2! 1! 2! 1! 2! Ect.)  
 Cross c! Knees bend, 1! Position, 2!  
 (Slow to fast keeping form as in V.)
10. Waist firm! Heads up! Push in! Against hands, breathe in!...Out!.. Push!..In! Out!..In!..Out!..L. bend! Breathe in!..Out!..R. bend! Breathe in!..Out!..In! Position, 2!

### 2.

1. A few order movements in seats such as—Attention! Gymnastics! Active sitting position! Cross a! c! Up. stretch! Fingers touch! Cross d! Above head hands strike! (repeat three times). Rise! Slightly, forward lean! Chest *firm*! Heads up! Eyes front! Hips firm! H. crook! Cross c! a-d! Change feet! Toe stand, fallout c! Backward bend! Backward toe stand, walk c! Forward bend! (Keep up on toes.) Up. stretch! L. bend! Walk e! R. bend! Position!
2. Backward bending as in 2, series 1.
3. Breathing exercises as in 3, series 1.
4. Up. stretch! Fingers touch! Knees bend! R. bend!...L. bend!.... Backw. bend! Half crook! Heel raise!...Change feet!...Cross c! a-d! Position

5. 1—Cross a-c, toe stand, walk c (1! 2! 1! 2! ect.).  
2—Cross a-d, toe stand, walk d (1! 2! 1! 2! ect.).
6. Backward bending as in 6, series 1.
7. L. R. bending and twisting as in 7, series 1.
8. Breathing exercises as in 8, series 1.
9. 1—Cross a (*strong*), toe stand, fallout c (1! 2! 1! 2! ect.).  
2—Chest firm (*strong*), knees bend.
10. 1—Cross c, slowly, inhale, 1! Quickly, quickly lips slightly parted, exhale, 2!  
2—Reverse the process, breathing in, quietly and quickly, out, slowly.  
3—Breathing exercises, as in 10, series 1.

### 3.

1. Exercises similar to those in 1, series 1 paying particular attention to such of the alphabetic positions as are still poorly executed.
2. Cross a, backw. bend, walk a (L. R. F. B. as in No. V), slowly (1! 2! 1! 2! ect.).  
Cross a-d, backw. bend, walk a (L. R. F. B. as in No. V). “ “
3. Breathing exercises as in 3, series 1.
4. Chest firm! Heels raise! Backw. bend! Up. stretch! Up on toes!...  
Fingers touch!...Steadily, slowly, half crook! (Keep toe stand, b. bend)  
....Position!
5. 1—Cross d, walk e, 1! Position, 2! (1! 2! 1! 2! ect.)  
2—Forw. reach, cross a, walk a, 1! Position, 2! (1! 2! 1! 2! ect.)
6. Backward bending as in 6, series 1.
7. L. R. bending and twisting as in 7, series 1.
8. Breathing exercises as in 8, series 1.
9. 1—Chest *firm*, toe stand, fallout b, 1! Position, 2! (1! 2! 1! 2! ect.)  
2—Cross a-c, h. crook, 1! Position, 2! (1! 2! 1! 2! ect.)  
3—Hips firm, knees bend, 1! Position, 2! (1! 2! 1! 2! ect.)
10. Breathing exercises as in 10, series 1.

### 4.

1. Review Dressings and Facings. Marching. Hips firm! Heels raise!  
Forward, (walk b step, 2-6 paces according to room), march!....Halt!  
Mark time! Backward, (L. R.), March! Halt! Mark time!....Halt!  
Position! Repeat.
2. Backward bending as in 2, series 1.
3. Breathing exercises as in 3, series 1.
4. Hips firm! Half crook! L. bend!....Cross c! R. up. stretch! Arms  
change! R. bend!....Feet change!...(Keep the bend). Cross a! Backw.  
bend! Position!
5. 1—Forw. reach, cross c, walk b, 1! Position, 2! (1! 2! 1! 2! ect.)  
2—Neck firm, elbows well back, walk c (1! 2! 1! 2! ect.).
6. Backward or forward bending as in 6, series 1.
7. L. R. bend and twist, as in 7, series 1.
8. Breathing exercises as in 8, series 1.
9. 1—Chest firm, toe stand, fallout c, 1! Position, 2! (1! 2! 1! 2! ect.)  
2—Neck firm, knees deep bend, “ “ “  
3—Cross c-d, half crook, 1! Position, 2! (1! 2! 1! 2! ect.)
10. Breathing exercises as in 10, series 1.



## 5.

1. Review 1, series 4—marching. Give firm and crosses and L. R. bending while the school is marching or marking time.
2. Backward bending as in 2, series 1.
3. Breathing exercises (*thoroughly*), as in 3, series 1.
4. H. crook! L. knee clasp! Heel raise!....Hands change! Feet change! Hands change!....Cross c!....Position!
5. 1—Cross a-d, walk d, 1! Position, 2! (1! 2! 1! 2! ect.)  
2—Cross e-c, walk c, “ “ “ “
6. Backward or forward bending as in 6, series 1.
7. L. R. twist, walk a, (L. R. F. B.) (1! 2! 1! 2! ect., 30-40 counts).  
L. R. bend as in 7, series 1.
8. Breathing exercises as in 8, series 1.
9. 1—Forward reach, cross e, h. crook, 1! Position, 2! (1! 2! 1! 2! ect.)  
2—Up. stretch (fingers touch), knees bend, 1! Position, 2! 1! 2! 1! 2! ect.)  
3—Cross c, fallout c, 1! Position, 2! (1! 2! 1! 2! ect.)
10. Breathing exercises as in 10, series 7.

## 6.

1. Cross c! Upw. stretch! Touch! L. bend! R. bend! Neck firm! Stand! Walk a! d! e! Half crook! Position!
2. Cross a! Stretch! Backw. slightly bend! To cross c! neck firm! Position.
3. Cross a-c, breathe in!....Out!....ect.
4. Half crook! Toe stand! Cross c....Hold it! Slowly—Change feet! Hold it!....Position!
5. Cross c, walk e, 1! 2! 1! 2! ect.
6. Cross c, 1! Neck firm, 2! Position, 3! 1! 2! 3! ect.
7. 1—Cross a, (*strong*) L. R. bend, 1! 2! 1! 2! ect.  
2—(Bend slowly and execute firms and crosses by commands.)  
1—Chest firm, L. R. twist, 1! 2! 1! 2! ect.  
2—Twist slowly and execute firms and crosses by commands.)
8. Cross c! Breathe in!....Out!....In!....Out!....Waist firm! In!....Out!....In!.... Position!
9. Cross c, half crook, 1! 2! 1! 2! ect.
10. Cross a-c, breathe in! Position, out! 1! 2! ect. Cross a, in!....c, out! d, in! ....Position!

# A PROGRESSION OF EXERCISES, WITH A VARIETY OF FORMS IN NUMBERS 5, 7 and 9.

1. A few commands, such as;—Cross c! Neck firm! Forw. reach! Cross a! Stand! Walk d! a! e! Change feet! Toe stand fallout d! Position!....
2. Fallout (toe stand), b! Cross a-c! Slightly backw. bend, stretch!....
3. As heretofore thorough breathing exercises. Cross a-d breathe in! Out! ect.
4. Toe stand, fallout a! Quietly, with a spring, change feet!
5. 1—(Counts, 30 to 40.) Forward reach, cross a, 1! Position, 2! (1! 2! 1! 2! ect.)  
 2—       “       Cross a-c, 1! Position, 2!       “  
 3—       “       Forw. reach, chest firm, 1! Position, 2!       “  
 4—       “       Forw. upw. stretch, touch, 1! Position, 2       “  
 5—       “       Forw. upw. stretch, neck firm, 1! Position, 2!       “  
 6—       “       Cross b-d, 1! Position 2!       “  
 7—       “       Cross c, walk e, 1! Position, 2!       “  
 8—       “       Chest firm, walk d, 1! Position, 2!       “
6. Slightly backw. bend! Cross c! Forw. bend! Forw. reach! Touch! Stoop! Floor touch! Upw. stretch! Reach! Backw. bend! Cross d-c!.... Position!
7. 1—(Counts, 30 to 40.) Hips firm! L. R. bend (1! 2! 1! 2! ect.).  
 Hips firm! L. R. twist (1! 2! 1! 2! ect.).  
 L. bend, 1! cross c, 2! a! R. bend, 1! e! 2! a-c! 1! Neck firm! 2! Hips firm! 1! Position!  
 Twist, 1! a! 2! Head firm! 1! e! 2! 1! b! 2! Chest firm! Position.  
 2—(Counts, 30 to 40.) Cross a! L. R. bend (1! 2! 1! 2! ect.)  
 (Counts, 30 to 40.) Chest firm! L. R. twist (1! 2! 1! 2! ect.)  
 Bend, 1! Cross c! 2! 1! 2! a! 1! Upw. stretch! Touch! 2! 1! 2! Neck firm! 1! Position!  
 Twist, 1! a! 2! e! 1! 2! Chest firm! 2! 1! 2! Neck firm! 1! Position!  
 3—(Counts, 30 to 40.) Cross a-c, L. R. bend (1! 2! 1! 2! ect.)  
 (Counts, 30 to 40.) Hips firm, L. R. twist (1! 2! 1! 2! ect.)  
 Bend, 1! c! 2! a-c! 1! 2! 1! e-a! 1! 2! Neck firm! 1! d! 2! Chest firm! 1! 2! Position!  
 Twist! Hips firm! 2! 1! 2! a! c! 1! e! a! d! 1! 2! 1! c! Position!  
 4—(Counts, 30 to 40.) Cross c, L. R. bend (1! 2! 1! 2! ect.)  
 (Counts, 30 to 40.) Cross b, L. R. twist (1! 2! 1! 2! ect.).  
 Bend, 1! a! 2! 1! c! 2! Neck firm! 1! 2! 1! e! 2! 2! 1! Position!  
 Twist, 1! 2! 1! 2! 1! a! 2! e! 1! b! 2! Head firm! 1! 2! 1! a! 2! 1! Chest firm! Position!
8. Waist firm! Breathe in! Out! In! Neck firm! Out!..Waist firm! In!.... Out!..In!..
9. 1—(Counts, 30 to 40.) Hips firm! Knees bend (1! 2! 1! 2! ect.).  
 2—       “       Hips firm! Half crook, knees bend, (1! 2! ect.)  
 3—       “       Hips firm! Half crook, deep knee bend, (1! 2! ect.)  
 4—       “       Cross c! Half crook, (1! 2! 1! 2! ect.).  
 5—       “       Chest firm! Toe stand, fallout b, (1! 2! 1! 2! ect.).  
 6—       “       Chest firm! Toe stand, fallout d, (1! 2! 1! 2! ect.).  
 7—       “       Chest firm! Toe stand, fallout c, (1! 2! 1! 2! ect.).  
 8—       “       Hips firm! Toe stand, fallout a, (1! 2! 1! 2! ect.).
10. Cross a-c, Breathe in! Out!.... Again! In!.... Out! Waist firm! In!.... ect.  
 A few order movements as in 1 if pupils are warm.



## EXERCISES FOR THE FIFTH GRADE.

### I.

1. Order movements such as—Cross e! b! x! Upw. stretch! Touch! Stand! a! c! d!
2. L. face! Fallout e! Backw. bend! Neck firm! Slowly backw. stretch! Position!
3. Thorough breathing exercises. Cross a-c, breathe in!.....Out!.....ect.
4. Half crook! Knee clasp! Body straight! Slowly, heel raise!....Knee bend!....
5. (Counts, 30 to 40.) Forw. reach, cross a, 1! Position, 2! (1! 2! ect.)  
 “ “ Forw. reach, cross e, 1! Position, 2! (1! 2! 1! 2! 1! 2!)  
 “ “ Forw. reach, cross e-c, 1! Position, 2! (1! 2! 1! 2! ect.)
6. Knees deep bend! Slightly backw. bend! Slowly, with finger tips, heels touch!
7. (Counts, 30 to 40.) Cross c, L. R. bend, 1! Position, 2! (1! 2! ect.)  
 L. bend, 1! Cross e-c, 2! R. bend, 1! Cross b! a! 1! c!  
 “ “ L. R. twist, cross a, 1! Position, 2! (1! 2! ect.)  
 L. R. twist, 1! a! e! 2! Stretch! 1! b! a! 2! 1! 2! 1!  
 a! 2! 1! 2! 2! 1! 2!
8. Cross a! walk e! Breathe in!....Out!..In!...Out!..c! In! Repeat!
9. (Counts, 30 to 40.) Cross a, walk a, knees bend, 1! Position, 2! (1! 2! 1! 2! 1! 2! ect.)  
 (Counts, 30 to 40.) Chest firm, toe stand, fallout d, 1! Position, 2! (1! 2! 1! 2! 1! 2! ect.)  
 (Counts, 30 to 40.) L. face! Cross a, fallout e, 1! Position, 2! (1! 2! ect.)
10. Cross e-c, breathe in!.....Out!....Again, in!....Out! Add knees bend. in!...Out!....Upw. stretch, touch, in!.....Out!....Repeat, in! Out!.. In!....Sit!

### 2.

1. (Order Movements.) Cross c! d! c! d! c! d! Upw. clap! Cross c! Fingers snap! Stand!
2. Sit!..Neck firm!..Eyes close!..Backw. stretch!.....Eyes open! Stand!
3. Stretch, touch, breathe in! Fill the lungs!..Hips firm! Breathe out!..... cross a-d, breathe in!....C and down, out!....Repeat two or three times.
4. Cross c! Heels lift! L. foot forw. extend!....Slowly, change feet!....
5. Cross a, Walk a, 1! Position, 2! (1! 2! ect.)  
 Cross a-e, Walk e, 1! Position, 2! (1! 2! ect.)  
 Cross d, Walk d, 1! Position, 2! (1! 2! ect.)
6. Neck firm! Backw. bend! L. upw. stretch! Arms change! Forw. bend! Cross c! d! Backward. bend!....knees bend!....Stretch, touch!....c!.. Stretch! Position!
7. L. R. bend, cross a. 1! Position, 2! (1! 2! ect.)  
 L. R. bend, 1! 2! 1! e! 2! c! 1! 2! 1! d! 2! 1! a! e! c! 2! 1! 2!  
 L. R. twist, cross b, 1! Position, 2! (1! 2! ect.)
8. Walk b! Breathe in!.....Hips firm! Fill the lungs!....Breathe out!.... In!.....Out!.. C! Knees bend! Breathe in!....A! Out!....Again! In!
9. Forw. reach, toe stand, fall. a, 1! Position, 2! (1! 2! 1! 2! ect.)  
 Upw. stretch, touch, c, half crook, 1! Position, 2! (1! 2! ect.)  
 Chest-hips firm, toe stand, 1! Knees bend, 2! (1! 2! 1! 2! ect.)
10. Cross a-c, breathe in!....Out!....Repeat several times. Forward four steps, march!....Backw. four steps march!....Stretch, touch! Sit!

Note.—While the counting in numbers 5, 7 and 9 will not be indicated in subsequent sets of exercises teachers should count for these exercises as in the first set of exercises.

## 3.

1. Attention! Stand! Forw. clap! Backw. clap. Upw. clap! Backw. clap! Repeat, 1! 2! 3! 4! Cross d, 1! c, 2! 1! 2! 1! 2! 1! 2! 1! 2! Faster! 1! 2! 1! 2! 1! 2! 1! 2! Hips firm! L. bend! R. bend! Position!
2. Cross a, walk a, backw. bend, 1! Cross c, 2! Position, 3! (L. R. F. B. 16 waltz measures.) Cross c!..Stretch the c! Slightly backw. bend!.. Cross a! Forw. bend! Position!
3. As heretofore thorough breathing exercises for about 60 seconds.  
Ex. a-c, breathe in!....Out!..In!....Out!..d-c, In!....Out!..In!....
4. 1—Fall. b! Hips firm! Change feet! Toe stand! L. bend! Position!  
2—Half crook! L. hand ankle clasp! Slowly (R.) knee bend!..Stretch!..  
3—Change feet and repeat 2. Toe stand! Backw. bend! Half crook!..  
4—Deep knee bend! Forw. jump! Backw. jump! (For hall or yard exercise.)
5. 1—Cross c, (long) walk d, 1! Position, 2! (1! 2! ect.)  
2—Forw. reach, cross b, walk a, 1! Position, 2! (1! 2! ect.)  
3—Upw. str., touch, walk e, 1! Position, 2! (1! 2! ect.)
6. Backw. (slightly) bend, 1!..Cross a! 2! c! 1! e! 2! b! 1! a-e-d!..2!
7. Fast bending. Cross a, L. R. bend, 1! Positon, 2! (32 counts, 16 bends.)  
Fast twisting. Cross b, L. R. twist, 1! Position, 2! (32 counts.)  
Slow bending. 1! 2! 1! cross a-c! 2! Hips firm! 1!..fall. b!..2! (ect.)  
Slow twisting 1!..2!..1! a! 2! c! 1! Head-neck firm! 2! (ect.) Position.
8. As heretofore thorough breathing exercises during 60 seconds
9. 1—Hips firm! R. (L.) face, fall. e, 1! L. (R.) face, position, 2! (32 counts, L. R. F. B. 4 times.)  
2—Repeat the above with some firm or cross.  
3—Cross d, toe stand, fall. d, 1! Position, 2!
10. Cross a-c, fill the lungs!..Breathe out!..In!..Out!..Waist firm! In!.. Out!..In!....Out!..a-d! In!....c! Out!..In!..Position! Sit!

## 4.

1. Attention! Stand! Fall. a!....d! Hips firm! Heel raise! Change feet! Half crook! Cross c! Backw. fall. a! Change feet! Cross e! d!
2. Neck firm! Elbows back!..Stretch!....Walk! e! a-c! Stretch! Fall, b! Forw. bend! Heads up! L. foot raise!....Slowly, change feet!..
3. As heretofore spend about 60 seconds in *thorough* breathing exercises.
4. 1—Half crook! Heel raise! Cross c! (Slowly forward extend foot.)  
2—Change feet and execute the above. Try to straighten the knee.
5. 1—Up. stretch, touch, walk e, 1! Position, 2! (1! 2! ect.)  
2—Forw. reach, cross a, walk a, 1! Position, 2! (1! 2! ect.)  
3—Cross d, walk d, 1! Position, 2! (1! 2! ect.)
6. Cross c, backw. bend, 1! Walk, e, 2! Position, 3! (waltz time.)  
Cross a, fall. a, slight backw. bend, 1! 2, 3. Position, 1! 2, 3. (8 measures.)
7. Cross a, walk a, L. R. bend, 1! Position, 2! (1! 2! ect.)  
Cross b, L. R. twist, 1! Position, 2! (1! 2! ect.)  
Cross c, L. R. bend, 1! Hips firm, 2! Position, 3! (32 measures.)  
Half crook, L. R. twist, 1! cross a, 2! Position, 3! (32 measures.)
8. Hips firm! Deeply! Inhale!....Push in! Exhale! (Ect. for 60 seconds.)
9. 1—Cross a-c, walk e, knees bend, 1! Position, 2! (1! 2! ect.)  
2—Cross a fall. a, 1! Position, 2! (1! 2! ect.)  
Breathing exercises as heretofore 50 seconds.  
If time allows or pupils are warm give a few easy order movements.



## 5.

1. Quietly stand! Cross c! x! a! m!  
Toe stand fall. b! Quietly, change feet!  
L. bend! R. bend! Position.
2. Neck firm! Elbows back! Stretch!....  
Cross c!... d!... Stretch!.... Position!
3. Breathe in!.... Out!.... In!... Position!
4. Cross d! Half crook! L. (slowly) bend!....  
Change feet!.. R. bend!.... Position!
5. Cross a-e, walk e, 1! 2! 1! 2! ect.
6. Cross c, slight backw. bend, fall. b, 1! 2, 3. Position, 1! 2, 3.
7. 1—Cross c, walk e, L. R. bend, 1! 2! 1! 2! ect.  
2—(The above more slowly in waltz time.)  
1—Stretch, touch, L. R. twist, 1! 2! 1! 2! ect.  
2—(The above more slowly in waltz time.)
8. Cross a! Breathe in!.... Out!.. e! In!.... Out!....  
Stretch!.. In!..L. bend! Out! R. bend! In!..
9. Neck firm, fall. b, toe stand, 1! 2! 1! 2! ect.
10. Waist firm! Breathe in!.... Out!.. In!....  
Out!.... Fill the lungs! In!.... Out!.. In!....

## 6.

1. Attention! Stand! Fall. a!...d! Hips firm! Heels raise! Change feet! Half crook! Cross c! Backw. fall. a! Change feet! Cross e! d! c! Position!
2. Neck firm! Elbows back!..Stretch!....Walk e! a-c! Stretch! Fall, b! Forw. bend! Heads up! L. foot raise!....Slowly, change feet! Position!
3. As heretofore spend about 60 seconds in *thorough* breathing exercises.
4. 1—Half crook! Heel raise! Cross c! Slowly, backw. bend!  
2—Change feet and execute the above.  
3—Hips firm, half crook! Knee bend! With a spring, R. or L. about face! (for hall or yard exercise.)
5. 1—Up, stretch, touch, walk e, 1! Position, 2! (1! 2! ect.)  
2—Forw. reach, cross c, walk a, 1! Position, 2! (1! 2! ect.)
6. Cross c, backw. bend! Walk d, 2! Position, 3! (8 measures waltz time.)  
Cross a, fall. a, slightly backw. bend, 1! 2, 3. Position, 1! 2, 3. (8 measures waltz time.)
7. Cross a, walk e, L. R. bend, 1! Position, 2! (1! 2! ect.)  
Cross b, L. R. twist, 1! Position, 2! (1! 2! ect.)  
Cross c, L. R. bend, 1! Hips firm, 2! Position, 3! (32 measures of waltz time.)  
Half crook, L. R. twist, 1! cross a, 2! Position, 3! (32 measures of waltz time.)
8. Hips firm! Deeply! Inhale!....Push in! Exhale! (Ect. for 60 seconds.)
9. 1—Cross a-c, walk e, knees bend, 1! Position, 2! (1! 2! ect.)  
2—Cross a, fall. a, 1! Position 2! (1! 2! ect.)
10. Breathing exercises as heretofore during 50 seconds.  
If time allows or pupils are warm give a few easy order movements.

# A PROGRESSION OF EXERCISES, WITH A VARIETY OF FORMS IN NUMBERS 5, 7 and 9.

1. Fix attention with a few commands such as—Cross c! x! e-a! Stand! Hips firm!
2. L. face! Fallout e! Backw. bend! Neck firm! Elbows back! Stretch! (Slowly.)
3. As heretofore thorough breathing exercises. Cross a-c, breathe in!..Out! ..ect.
4. Half crook! Knee clasp! Body straight! Heel raise! Knee bend! Forw., backw., twice hop! (The heel is raised and the hop is made with little noise by bending the knee when the toe touches the floor.)
5. 1—(Counts, 30-40.) Forw. reach-cross a, 1! Position, 2! (1! 2! 1! 2! ect.)  
 2— “ “ Forw. reach-cross e, 1! Position, 2! “  
 3— “ “ Forw. reach-cross e-c, 1! Position, 2! “  
 4— “ “ Cross a, walk a, 1! Position, 2! “  
 5— “ “ Cross a-c, walk e, 1! Position, 2! “  
 6— “ “ Cross d, walk d, 1! Position, 2! “  
 7— “ “ Cross b, walk c, 1! Position! 2. “  
 8— “ “ Cross b-c, walk a, 1! Position, 2! “
6. Knees deep bend! Slightly backw. bend! Finger tips touch!
7. 1—Hips firm! Walk e, L. R. bend, (1! 2! 1! 2! 1! 2! 1! 2! ect., 20-30 times).  
 Cross a, L. R. twist, “  
 L. bend, 1! Cross e! c! 2! R. bend 1! Neck firm! Choss c! 2! 1! a! e! c! 2!  
 R. (L.) twist, 1! a! 2! c! 1! e-a! 2! b! d! 1! 2! 1! c! 2! 1! Neck firm! 2!  
 2—Cross c, L. R. bend, (1! 2! 1! 2! 1! 2! 1! 2! ect. 20-30 times).  
 Chest firm, L. R. twist, “  
 L. bend, 1! a! c! 2! R. bend, 1! e-c! 2! 1! 2! 1! Chest-head firm! 2!  
 L. twist, 1! a! e! 2! R. twist, 1! b! e! 2! 1! 2! 1! a! Head-chest firm! 2!  
 3—Cross c, walk c, L. R. bend (1! 2! 1! 2! 20-30 times).  
 Head-neck firm, L. R. twist “  
 Cross c! L. (R.) bend, 1! a! 2! 1! e-a! 2! 1! c-e! 2! Neck firm! 1! 2!  
 Hips firm! L. (R.) twist, 1! 2! 1! Upw. stretch! Touch! 2! 1! 2! c! 1! 2!  
 4—Cross a-c, L. R. bend, (1! 2! 1! 2! 1! 2! 1! 2! ect, 20-30 times).  
 Neck-hips firm, L. R. Twist, “  
 L. bend, 1! 2! R. bend, 1! a! 2! 1! c! 2! a-e! x! 1! 2! 1! b! c! 2! 1! 1!  
 L (R.) twist, 1! a! 2! e-c! 1!...Fallout d! 2! 1! Half crook! 2!
8. Cross a! Fallout c! Breathe in!...Hips firm! Out!...Cross c! In...ect.
9. 1—(Counts, 30-40), Cross a, walk a, knees bend, (1! 2! 1! 2! ect.)  
 2— “ “ Chest firm, toe stand, fallout d, (1! 2! 1! 2! ect.)  
 3— “ “ L. face! Neck firm, toe stand, fallout a, (1! 2! ect.)  
 4— “ “ Forw. reach, cross a, toe stand, fallout a, (1! 2! ect.)  
 5— “ “ Upw. stretch, touch, cross c, half crook, (1! 2! ect.)  
 6— “ “ Chest-hips firm, toe stand, fallout b, (1! 2! 1! 2! ect.)  
 7— “ “ Cross c, toe stand, fallout c, (1! 2! 1! 2! ect.)  
 8— “ “ Chest firm, knees deep bend, (1! 2! 1! 2! ect.)
10. Cross e-c, breathe in!...Out!..Again, in!...Out!...Cross c, knees bend, in! Stretch! out!...Neck firm! Breathe in!..Out!..In!..Out!..ect.  
 A few order movements similar to those in 1, if pupils are warm.



## EXERCISES FOR THE SIXTH GRADE.

### I.

1. Attention! Stand! Fall. a! . . . d! Hips firm! Heels raise! Change feet! Half crook! Cross c! Backw. fall. a! Change feet! Cross e! d! c!
2. Neck firm! Elbows back! . . . Stretch! . . . Walk e! a-c! Stretch! Fall, b! Forw. bend! Heads up! L. foot raise! . . . Slowly, change feet! Position!
3. As heretofore spend about 60 seconds in *thorough* breathing exercises.
4. 1—Half crook! Heel raise! Cross c! Slowly, backw. bend!  
2—Change feet and execute the above.  
3—Knees bend! With a spring, L. or R. about face! (for hall or yard.)
5. 1—Up. stretch, touch, walk e, 1! Position, 2! (32 counts, 16 movements.)  
2—Forw. reach, cross c, walk a, 1! Position, 2! (32 counts, 16 movements.)
6. Cross c, backw. bend, 1! Walk d, 2! Position, 3! (8 measures waltz time.)  
Cross a, fall. a, slight backw. bend, 1! 2, 3. Position, 1! 2, 3. (8 measures.)
7. Cross a, walk e, L. R. bend, 1! Position, 2! (32 counts, 16 bends.)  
Cross b, L. R. twist, 1! Position, 2! (32 counts, 16 bends in 16 seconds.)  
Cross c, L. R. bend, 1! Hips firm, 2! Position, 3! (32 measures.)  
Half crook, L. R. twist, 1! cross a, 2! Position, 3! (32 measures.)
8. Hips firm! Deeply! Inhale! . . . Push in! Exhale! (Ect. for 60 seconds.)
9. 1—Cross a-c, walk e, knees bend, 1! Position, 2! (32 counts.)  
2—Cross a, fallout b, 1! Position, 2! (32 counts, 16 movements.)  
3—Cross c, half crook, 1! Position, 2! (32 counts, 16 movements.)
10. Breathing exercises as heretofore during 50 seconds.  
If time allows or pupils are warm give a few easy order movements.

### 2.

1. Attention! Cross c! . . . Hips firm! Stand! Fall. d! Half crook! Change feet! Ect. (Use about 30 seconds for 1.)
2. Cross c! backw. bend! . . . Fall. a! forw. (heads up!) bend!—heels raise! Change feet! Backw. bend! . . . Chest firm! Neck firm! Slowly,—Stretch!
3. Breathings as heretofore. (Waist firm! Inhale!—Deeply!—Exhale!—Ect.)
4. 1—Cross e! Half crook! toe stand! . . . Cross c! . . . Change feet! . . .  
2—Half crook! L. (R.) twist! L. chest firm! R. neck firm! Slowly, heel raise! . . .  
3—Repeat 2, twisting in the other direction. (Use about 60 seconds for 4.)
5. 1—Chest-hips firm, walk e, 1! Position, 2! (32 counts, 8 measures.)  
2—Cross e-a, walk a, 1! Position, 2! (32 counts, 8 measures, quick step.)
6. Palms on highest part of back of desks, . . . place! Slowly, knees raise! Arms straight! Heads up! Chests out! (By thus using the double half crook the body can be supported by the arms for a few seconds. With practice the time may be prolonged. Within a few weeks the elbows may be bent and the arms then straightened, thus lifting the weight of the body.)
7. Neck firm, half crook, L. R. bend, 1! Position, 2! (32 counts, 16 bends.)  
Cross a, knees bend, L. R. twist, 1! “  
As heretofore, slow bending and twisting.  
Cross c, 1! Fall. a, 2! L. R. bend, hips firm, 3! Position, 4! (L. R. F. B. twice.)  
Head hips firm, 1! L. R. twist, 2! Chest firm, 3! Position, 4! “
8. Thorough breathing exercises as heretofore, for about 60 seconds.
9. 1—Neck firm, toe stand, fall. d, 1! Position, 2! (L. R. F. B., 32 counts.)  
2—Cross a. . . R. (L.) face, fall. e, 1! Position, L. (R.) face), 2!

3—When 1 and 2 are well executed the alternate lines can perform 1 while the other lines execute 2. The two divisions can then change exercises and repeat.

10. Cross a-c, breathe in!—Out!—Again! In....Out!...Waist firm! In!....Out!....In!..Fall. a! Out!..In!..Devote about 60 seconds to 10.

### 3.

1. Cross c! Forw. reach! (Desk and seat exercises.) Desks firm! Desks stand! (Swing to standing position on hands: knees in double half crook.)
2. (Keep hands in place.) Deep knees bend!—Desks stand! L. sit! R. sit! Deep knees bend! Desk lean! Stand! L. bend! Cross c! Seat lean! R. seat lean, 2! Left, 1! 1! 2! 1! 2! ect. (Number different positions and play seat and desk games.)
3. Waist firm! Breathe in!....Out!..In!....Out!..a-c, in!....Position.
4. Stretch, touch! half crook! L. twist! Slowly, heel lift!..(Same with other leg.)
5. L. cross c. R. neck firm, (alternate) walk a, 1! 2! 1! 2! etc.
6. Neck firm 1! walk d, 2! c to position 3! 1! 2, 3, ect.  
(Emphasize the 1! in the waltz time.)
7. 1—Cross a-c, walk e, L. R. bend, 1! 2! 1! 2! ect.  
1—Neck firm, knees bend, L. R. twist, 1! 2! 1! 2! ect.  
2—Fingers interlock! walk e, L. R. bend, 1! 2, 3. ect.  
2—Stretch, touch, chest firm, L. R. twist, 1! 2, 3. 1! 2, 3. ect.
8. c! Fall. b. Breathe in!....Out!..In!....  
Heels lift! change feet! Out!..In!....Position!
9. Cross e-c, walk e, knees bend, 1! 2! 1! 2! ect.
10. a-c, breathe in!....Out!..Again! In!....Out!..a, in!....Out!..In..

### 4.

1. Order movements similar to those in 1, series 1. Rise! L., chest firm! R. cross c! Hands change! L. bend! R. up. stretch! R. bend! Position!
2. Desk exercises as in 1 and 2, series 3.
3. 1—Cross c. inhale deeply, 1!....Quickly, quietly (lips slightly parted), exhale, 2! Repeat.
4. Knees bend! Up. stretch! Fingers touch! Backward bend!....Knees stretch! Toe stand! H. crook! Cross c! L. cross a! Hands change!....Position!
5. 1—Cross e-c, walk c. 1! 2! 1! 2! ect.  
2—Cross a-d, walk e. 1! 2! 1! 2! ect.  
3—L. cross c, R. cross a, walk a, 1! 2! 1! 2! ect.
6. Backw. or forw. bending as in 6, series 1,
7. L. R. bend or twist as in 7, series 1.
8. Cross a-d, walk d, 1! Inhale—Cross a, walk e, 2! Exhale!—Repeat.  
Waist firm, walk c, 1! Inhale—H. crook, 2! Exhale!....Repeat.
9. Cross a-c, toe stand fallout c. (1! 2! ect.)  
Up. stretch, fingers touch, knees deep bend. “  
Cross c-d, h. crook. “
10. Breathing exercises similar to those in 10, series 1.



1. Attention! Gymnastics! Hips firm! L. bend! R. bend! Cross a-c! Position! Rise! L. up. stretch! R. cross a! Walk d! Change hands! Change feet! H. crook! Toe stand, fallout c! Change feet! Cross a! Backw. bend! Heels raise! Position!
2. Seat and desk exercises as in 2, series 3.
3. Breathing exercises as in 3, series 1.
4. H. crook! Cross a! L. turn! Heel raise!...R. turn!...Fallout c! Toe stand! Backw. bend! Cross d! Backward, toe stand, fallout c! L. bend!
5. 1—Cross e-c, walk e, 1! 2! 1! 2! ect.  
2—Neck firm, cross c, walk d, 1! 2! 1! 2! ect.  
3—Head-chest firm, walk a, 1! 2! 1! 2! ect.
6. Backward bending as in 6, series 1.
7. 1—L. R. bend (or turn), cross a, walk a, 1! 2! 1! 2! ect.  
2—L. R. twisting as in 7, series 1, 1! 2! 1! 2! ect.
8. Breathing exercises as in 8, series 1.
9. 1—Hips firm! Heels raise! Very fast h. crook (stationary run), 1! 2! 1! 2!  
2—Cross c, fallout c, 1! 2! 1! 2! ect.  
3—Up, stretch, fingers touch, knees bend, 1! 2! 1! 2! ect.
10. Breathing exercises similar to those in 10, series 1.

## 6.

1. Attention! Cross a! (False signals) x! g! e! o! c! Chest...hips firm! Rise! Seats! Head...chest firm! Rise! Forward lean! Chest firm! Strong! Position! Cross a! Walk e! a! d! Backw. a! Change feet! d! e! Forw. a! d! Heads up! c! H. crook! Change feet!...Cross c-e! b-d! Fallout c! Change feet! Chest firm! Position!
2. Seat and desk exercises as in 2, series 3.
3. Breathing exercises as in 3, series 1.
4. Hips firm! Fallout b! Forw. (prone until body is horizontal) bend! Until it is in the same plane as the body (horizontal). R. foot backw. upw., raise!...Position! Execute the same movement standing on the L. leg. Keep raised toes extended.
5. 1—Cross a, h. crook, toe stand, walk c, 1! 2! 1! 2! ect.  
2—Cross c, h. crook, toe stand, walk d, 1! 2! 1! 2! ect.  
3—Cross d, h. crook, toe stand, walk b, 1! 2! 1! 2! ect.
6. Backward bending as in 6, series 4.
7. L. R. bending or twisting as in 7, series 6.
8. Breathing exercises as in 8, series 3.
9. 1—Cross a-d, fallout c, 1! 2! 1! 2! ect.  
2—Cross a, neck firm, knees bend, 1! 2! 1! 2! ect.  
3—Hips firm! Heels raise! Walk e, Knees bend! Spring to walk e position R. side, L. side, R. L. R. L. by counts, 1! 2! ect.
10. Breathing exercises and order movements.

# A PROGRESSION OF EXERCISES, WITH A VARIETY OF FORMS IN NUMBERS 5, 7 AND 9.

1. To fix attention use a few commands such as: Chest firm! cross c! e! ect.
2. Seat and desk exercises as in 1 and 2, series 3.
3. As heretofore thorough breathing exercises. Cross a-d, breathe in!....
4. Hips firm! L. (R.) twist! Heels raise!....Slowly L. (R.) bend!....
5. 1—(Counts, 30-40). Cross a, walk a, 1! Position, 2! (1! 2! 1! 2! ect.)  
 2— " Cross a-e-c, walk a, 1! "  
 3— " Cross e-a, walk e-a, 1! "  
 4— " Cross a-neck firm, walk d, 1! "  
 5— " Forw. reach, chest firm, walk e-d, 1! "  
 6— " Forw. upw. stretch, touch, c, walk e-b, 1! "  
 7— " Forw. stretch L. chest, R. neck firm, 1! "  
 8— " Cross c, neck firm, cross a, walk a, 1! "  
 9— " Head-neck firm, walk d, 1! "  
 10— " Chest-hips firm, walk e-d, 1! "  
 11— " Cross a, 1! Walk a, 2! Cross c, 3! position, 4! (1! 2! 3! 4! ect.)  
 12— " Cross a-c, 1! Walk e-a, 2! Chest firm, 3! posit., 4! "
6. L. upw. stretch, R. cross a, slowly alternate and pull hard as when climbing a rope.
7. 1—Hips firm! Walk e, knees bend, L. R. bend, (1! 2! 1! 2! 1! 2! ect.)  
 Fists clinch! Cross a, walk a, L. R. twist. "  
 L. (R.) bend, 1! a! c! 2! 1! 2! 1! Neck firm! Fallout b! 2! a! 1! 2! e-c!  
 1! o! 2! position!  
 L. (R.) twist, 1! 2! 1! a! x! e! o! 2! 1! a! Neck firm! 2! 1! Head firm!  
 2—Chest-hips firm, L. R. bend, (1! 2! 1! 2! 1! 2! ect. 20-30 times.)  
 Head-neck firm, L. R. twist, "  
 L. (R.) bend, 1! 2! 1! a-c! x! o! d! 2! c! m! 1! 2! 1! Upw. stretch,  
 touch! 2! 1! 2! position!  
 L. (R.) twist, 1! 2! 1! Fallout b! 2! 1! 2! cross a! 1! 2! Change feet!  
 3—Cross c, half crook, L. R. bend, (1! 2! 1! 2! 1! 2! 1! 2! ect. 20-30 times.)  
 Chest firm, forw. walk d, L. R. twist, "  
 Cross a, 1! L. (R.) bend, 2! Cross c, 3! position, 4! (1! 2! 3! 4! ect. 16-20 times.)  
 Neck firm, 1! L. (R.) twist, 2! Chest firm, 3! posit., 4! (1! 2! 3! 4! ect.)  
 4—Half crook, knee clasp, L. R. bend, (1! 2! 1! 2! 1! 2! ect. 20-30 times.)  
 Hips firm, Knees bend, L. R. twist, (1! 2! 1! 2! 1! 2! ect, 20-30 times.)  
 Cross a, 1! Fallout b, 2! L. (R.) bend, 3! position, 4! (1! 2! 3! 4! ect.)  
 Neck firm, 1! L. (R.) twist, 2! Knees bend, 3! posit., 4! (1! 2! 3! 4! ect.)
8. Cross e-c! Breathe in!...Out...a! In!...d! Out!...c! In!...ect.
9. 1—(Counts, 30-40), Cross a-c, toe stand, fallout d, (1! 2! 1! 2! 1! 2! ect.)  
 2— " R. face! Head-chest firm, fallout e, "  
 3— " Cross a, half crook, fallout b, "  
 4— " Cross c, half crook, walk e, "  
 5— " Forw. upw. stretch, touch, knees bend, "  
 6— " Neck firm, knees bend, fallout b, "  
 7— " Cross d, fallout d, cross e, walk e, "  
 8— " Head, chest, hips firm, L. (R.) face, fallout e, "  
 9— " Cross a, 1! Fall. b, 2! Chest firm, 3! position, 4! (1! 2! 3! 4! ect.)  
 10— " Forw. upw. stretch, touch, 1! Knees bend, 2! c, 3! position, 4!
10. Cross a-d, breathe in!....Hips firm! Out!....In!....Out!....a-c, in! ect.  
 If the school is warm a few order movements similar to those in I.



## SEVENTH GRADE EXERCISES. (WITH WANDS).

**Leg work:**—Performed as heretofore.

**Trunk work;**—Performed as heretofore essentially. The arms are held in the same positions as in free-hand firms and crosses. The same muscles are contracted.

**Position.** Arms down at side, back of hands front, hands grasping wand about midway between ends and centre.

**Hips firm.** Thumb (flexor), surface of wrist rests on hips instead of thumb and forefinger.

**Head firm.** The wand takes the place of the fingers on the forehead.

**Neck firm.** The wand takes the place of the fingers at back of neck, elbows raised.

**Chest firm.** The wand rests on upper back and shoulders, elbows close to sides.

**Cross a.** Hands grasp wand midway between end and centre, elbows horizontal.

**Cross b.** Slide hands to ends of wand.

**Cross c.** Extend L. arm to the cross c position, R. arm following.

**Cross d.** Extend L. arm to cross d position, R. arm (palm down) following.

**Cross e.** The wand is held above head, hands at the end, arms in cross e position.

**Forw. reach.** The wand is grasped midway between ends and centre.

**Upw. stretch.** The wand is held as in Forw. reach.

**Carry wands.** The wand is held vertically by the thumb and first and second fingers of R. hand midway between end and centre, long end touching shoulder in front, arms down at sides. (Used in marching.)

**Exceptions.**—Crosses c and d, as in foot work, move to the left first. In count work they alternate, L. R. L. R., etc. Both arms are kept horizontal.

**General.**—In all cases, as in free hand work, the elbows are drawn well back and the muscles are forcibly contracted when firms and crosses are executed. In crosses b, c, d and e the hands grasp the wand at its ends. In all other cases about midway between the ends and centre. As in free hand work one hand may occupy one position while the other is in another. Any class which can execute free hand with music can readily do the same with wands, and the fixing of the hands will give a more uniform appearance.

# I.

1. Attention! Rise! First file, march! (Those in the aisle nearest the wands march past the wand holder and take wands, followed immediately by the others, and march back to the original position.)  
Attention! R. (L.) dress! Heads up! (To R. or L.), straighten lines! Front! Position! Upw. stretch! Fallout b! Neck firm! Walk e! Cross c! Change feet! Change hands! Cross d! Position!
2. Upw. stretch, chest firm, walk e, slight backw. bend, 1! 2, 3. Position, 1! 2, 3. (Bend 8 times.)
3. Slowly, upw. stretch, breathe in, 1!...Cross c, out, 2!..In!..Out!..In! Neck firm! Breathe in! Out!..In!..Out!..In!..Position.
4. Chest firm. Half. crook! L. bend! Upw. stretch! R. bend! Backw. bend! Neck firm! Forward bend! Heads up! Toe stand! Back. bend!
5. (Counts, 30 to 40.) Cross c, walk e, 1! Positions, 2! (1! 2! etc.)  
" L. cross a, R cross b, (alternate). walk b, Position, (1! 2!)
6. Cross a-e, walk a, (8 *slight* backw. bends), 1! 2, 3. (Bend 8 times.)
7. (Counts, 30 to 40.) Cross a, walk a, L. (R.) bend, 1! Cross c, position, 2! (Counts, 30 to 40.) Cross e, walk e, L. (R.) turn, 1! Cross c, position, 2! (Slow, L. R. bending and twisting with arm movements by command.)
8. Walk e! Chest firm! Breathe in!..Out!..In!..Out!..Neck firm! Fill the lungs!..Exhale!...Breathe in!..Walk d! Out! In!..Position!
9. (Counts 30 to 40.) Upward stretch, chest firm, fall out b, 1! Cross a, position 2! (1! 2! etc.)  
(Counts, 30 to 40.) Half crook, 1! Cross c, 2! Knee bend, 3! Position, 4! (Similar four part movements can be given and counted—1! 2! 1! 2!)
10. Neck firm! Breathe in!..Out!..L. bend! In!..Out!..R. bend! In!..Out!..In!..Out!..Forw. bend! Upw. stretch! In!..Position!  
(Please notice that all of the details of the Progression are the same as in free hand work.)

# 2.

1. Proceed as in 1, Series 2.
2. L. cross d, R. head firm, walk d, backw. bend, (8 times, hands alternating.)
3. Forw. upw. stretch, breathe in, 1! Sidew. downw. out, 2! (Four times, slowly, gracefully.) Alternate L. R. Cross d, breathe in! Out!
4. Toe stand! Fall out b! Cross a! Backw. toe stand, cross d, L. bend, fall out b, 1!..R. bend, cross a-c, 2! Forw. upw. sidew. to c, half crook, toe stand, 3!...Cross a! Position!
5. L. cross a-neck firm, R. d, (Alt.) (1! 2! 1! 2! etc.)  
Alternate, L, chest firm, R. cross c, walk e.
6. Cross a-d, toe stand, fallout c, backw. bend, 1! 2, 3. Position, neck firm, 1! 2, 3.  
Cross a-neck firm, backw. bend, 1! c! 2! Chest firm! 1! a! 2a e-c! 1!
7. Cross a-c, L. R. bend, toe stand, fall out b, (1! 2! 1! 2! etc.)  
Head-chest firm, walk e, L. R. twist, 2!  
L. (R.) bend, 1! Fall out b, 2! Cross a, 3! Position, 4! (1! 2! 3! 4!)  
L. (R.) twist, 1! Cross a, 2! Neck firm, 3! Position 4! (1! 2! 3! 4! etc.)
8. Cross c, walk d, 1! Breathe in! d, d, 2! Breathe out! a, a, 1! In! Neck firm, walk e 2! Out! In! Out! Backw. fall out b, Out! L. bend! In! Out! R. bend! In! Position!
9. L. Cross a-c (alternate) toe stand fall out c, (1! 2! 1! 2! etc.)  
Forward upw., sidew. downw. stretch, knees bend.
10. Waist firm! Breathe in! Out! In! Out! Out! a-c, in! Out! Forw. upw. downw., in! Out! Cross c! Fall out b! Breathe in....Out! In!



3.

1. Attention! Cross a! c! L. bend! R. bend! Backw. bend! Stand!
2. Cross a-d, fall. d, backw. bend, 1! Cross c, hips firm, 2! Position, 3! (L. R. F. B. four times, using 32 measures of slow waltz time.)
3. Breathing exercises as heretofore.
4. Cross d, walk d, 1! Cross c, walk e, 2! Position, 3! (Waltz time. L. R. F. B. 4 times.)
5.
  1. A. Cross a-e, walk a, 1! Position, 2!
  2. B. Chest-hips firm, walk e, 1! Position, 2! (Call alternate lines division A, the other lines division B. When A and B. have executed 5-1 and 2, L. R. F. B. twice, 16 counts, have the divisions change exercises and count again. Then have the halves of the school face toward the center and the divisions repeat 1 and 2. Again have the divisions change exercises. Then have the outside lines face outward and the middle lines of each half of the school face front or rear and repeat 1 and 2. If desired, a similar formation can be used in 7 and 9.)
6. Walk e, cross a, 1! 2, 3. Cross d-c, backw. bend, 1! 2, 3. Position, 1! 2, 3. (Waltz time, 32 measures.)
7.
  - A. Cross a-c, walk b, L. R. bend, 1! Position, 2! (8 measures fast march music.)
  - B. Head, chest firm. L. R. twist, 1! Position, 2! (8 measures fast march music.)
  - A and B exercises change!
  - A. Fall, a, cross a, 1! 2, 3. L. (R.) bend, 1! 2, 3. Position, 1! 2, 3. (8 measures slow waltz music.)
  - B. L. (R.) twist, cross a, 1! 2, 3. L. (R.) bend, 1! 2, 3. Position, 1! 2, 3. (8 measures slow waltz music.)
  - A and B exercises change!
8. Cross a-c, fall. b, 1! 2, 3. Inhale.. (3 measures waltz time). Position, 1! 2, 3. Exhale!  
(L. R. F. B. once. Take position on 1! 2, 3. Breathe in for three measures. Return to fundamental position on 1! 2, 3. Exhale during three measures, etc.)
9.
  - A. Head-chest firm, fall b, 1! 2, 3. Hips firm, 1! 2, 3. Position, 1! 2, 3. (L. R. F. B. twice..8 measures waltz time.)
  - B. L. cross a, R. chest firm, (alternate), 1! 2, 3. Knees bend, 1! 2, 3. Position, 1! 2, 3. (8 measures waltz time.)
  - A and B exercises change, 1! 2, 3, etc. (8 measures waltz time.)

(As soon as the exercises in 9 are well executed the formation suggested in 5 can be used effectively. When the forms suggested in 5, 7 and 9 become stale, substitute new exercises with the same formations. This has been successfully tested in a number of seventh grade rooms.)

## 4.

10. Breathing exercises as heretofore.
  1. (A few alphabetic positions.)
  2. Upw. stretch, neck firm, 1! 2, 3.  
Position, cross a, 1! 2, 3 (8 measures.)
  2. Chest firm! Breathe in! 1! 2, 3, out 1! 2, 3.  
Reach, stretch, breathe in, 1! 2, 3. Neck firm!
  4. Upw. str. 1! cross c, 2. Neck firm, 3. 1! 2, 3. etc.  
(16 measures, waltz time. Add a balance step.)
  5. Cross c, walk e, 1! Chest firm, position, 2! 1! 2! 1! 2! etc.  
(Medium to fast march time.)
  6. Slight backw. bend, chest firm, walk b, 1! 2, 3.  
Position, cross c-d, 1! 2, 3. (16 waltz measures.)
  7. 1. L., (R.) upw. stretch, R. (L.) cross e, L. R. twist, 1! 2! 1! 2! etc.  
2. Neck firm! Cross a L. R. bend, 1! Neck firm, posit., 2! etc.  
1. (Similar forms with waltz time.)  
2. " " " " "
  8. Upw. stretch! breathe in!.... Cross c! out!..  
Stretch! In!....a! out!..e! In!....
  9. Girls, (alternate lines,) c, knees bend, 1! e, posit. 2!  
Boys, (alternate lines,) stretch, half crook, 1! e, posit. 2!  
Exercises change! (16 measures, march time.)

## 5.

10. Neck firm, walk e, cross c, breathe in, 1! 2, 3.  
Position, neck firm, out, 1! 2, 3. (16 measures.)
  1. Attention. Cross a! c! Hips firm! Stand! March!.....Position!
  2. Upw. str. neck firm, 1! Fall. b, 2! Cross c, backw. bend, 3! Position, neck firm, 4! (24 measures waltz time.)
  3. Slowly, gracefully, a-c, inhale!....Exhale!....To the right, inhale!
  4. Cross a-d, fall. a, 1! 2, 3. Head firm, 1! 2, 3. Position, 1! 2, 3.  
1—(Counts, 30 to 40.) Upw. stretch, chest firm, walk e, 1! Position, 2!  
2— " Cross a-c, walk a, 1! Position, 2!  
3— " A, take 1. B, 2, Position, 2!  
4— " A and B exercises change!  
(The two sections of the school may execute as in the formations suggested in No. 5, series 4.)
  6. Chest firm, fall. a, 1! 2, 3. Backw. bend, cross c, 1! 2, 3. Position, 1! 2, 3.
  7. 1—A. Cross a-c, walk e, L. (R.) bend, 1! Position, 2!  
B. Cross a, chest firm, L. (R.) twist, 1! Position, 2!  
2—A and B exercise change!  
(In 1 and 2 use a quickstep, eight measures to the movement. .32 counts.)  
3—A. Fall. c, cross a, 1! 2, 3. Neck firm, L. (R.) bend, 1! 2, 3. Position, 1! 2, 3.  
B. Walk a, chest firm, 1! 2, 3! L. (R.) twist, cross e, 1! 2, 3! Position, 1! 2, 3!  
4—A and B exercises change!
  8. Fall. b, neck firm, 1! Deeply, inhale!....Exhale!..Repeat!..Slowly, L. bend! Repeat!..R. bend! Breathe deeply!....Position!
  9. 1—Fall. d, cross a, 1! Fall. a, head firm, 2! Cross e, walk e, 3! Neck firm, position, 4!  
2—R. (L.) face, fall. e, upw. str., 1! Walk e, neck firm, 2! L. (R.) face, 3! Position, 4!  
3—A. execute 1. B 2,  
(With 9 use fast waltz time. Execute each movement L. R. F. B. twice.)
  10. While marching breathe in during four steps and out during the next four. Repeat several times. Forward march!



# A PROGRESSION OF EXERCISES, WITH A VARIETY OF FORMS IN NUMBERS 5, 7 AND 9.

1. Take wands and prepare for exercise.
2. Fallout b, 1! Cross a-c, 2! Slightly backw. bend, 3! Position, 4! (Repeat L. R. F. B.)
3. As heretofore thorough breathing exercises. Cross a-e-d, breathe in! . . . ect.
4. Cross c, toe stand fallout, c, L. (R.) bend, 1! 2, 3. Position, 1! 2, 3.
5. 1—(Counts, 30-40.) L. Cross c, R. cross a, walk e, 1! Position, neck firm, 2! (1! 2! 1! 2! ect.)  
 2—(Counts, 30-40.) L. forw. reach, chest firm, R. Cross a, (1! 2! ect.)  
 3— “ “ L. Cross a-c, R. upw. stretch, (1! 2! 1! 2! ect.)  
 4— “ “ Repeat 3 with walk d, (1! 2! 1! 2! ect.)  
 5— “ “ R. L. a, walk e, 1! 2! 1! 2! ect.)  
 6— “ “ Cross a-d, walk d, (1! 2! 1! 2! ect.)  
 7— “ “ Cross a, 1! walk a, 2! Hips firm, 3! position, 4!  
 8— “ “ Walk e! Chest firm, 2! Cross c, 3! position, 4!
6. Fallout b! Cross c! Stretch! Backw. bend! Forw. bend! Backw. stretch!
7. 1—(Counts, 30-40.) Cross a-neck firm, walk e, L. R. bend, (1! 2! 1! 2! ect.)  
 “ “ Cross a-chest firm, knees bend, L. R. Twist, ect.  
 “ “ Cross e-c, 1! L. (R.) bend, 2! Walk d, 3! position, 4!  
 “ “ Cross b, 1! Fallout b, 2! L. (R.) twist, 3! position, 4!  
 2— “ “ Upw. stretch, neck firm, L. R. bend, (1! 2! 1! 2! ect.)  
 “ “ Cross c, chest firm, L. R. Twist, (1! 2! 1! 2! ect.)  
 “ “ L. a-R. c, (alternate), half crook, L. R. bend, ect.  
 “ “ R. face! Cross c, 1! Fall. e, 2! L. (R.) twist, 3 position, 4! 1! 2! 3! 4! ect.)  
 3— “ “ R. chest-L. e, (alternate), L. R. bend, (1! 2! ect.)  
 “ “ The same with L. R. twist, (1! 2! 1! 2! ect.)  
 “ “ Cross c, 1! L. (R.) bend, 2! Half crook, 3! position, 4! (1! 2! 3! 4! ect.)  
 “ “ Neck firm, 1! Fall. b, 2! L. (R.) twist, 3! position, 4!  
 4— “ “ Upw. stretch, neck firm, walk e, L. R. bend, (1! 2!)  
 “ “ The same with L. R. twist, (1! 2! 1! 2! ect.)  
 “ “ L. a-R. b, 1! Walk e-knees bend, 2! L. (R.) bend, 3! position, 4!  
 “ “ Chest firm, 1! Fall. d. 2! L. (R.) twist, 3! position, 4!
8. Hips firm! Breathe in! . . . Out! . . . Fill the lungs! . . . Out! . . . Breathe in! . . . Out! . . . Cross a-c! In! . . . d! Out! . . . Neck firm! In! . . .
9. 1—(Counts, 30-40.) Forw. reach-cross d, walk e, knees bend, (1! 2! ect.)  
 2— “ “ L. cross a, R. hip firm, (alternate), half crook, ect.)  
 3— “ “ Hips-head-chest firm, toe stand Fallout b, (1! 2! ect.)  
 4— “ “ L. (R.) face, upw. stretch, touch, fall. e, 1! posit., 2!  
 5— “ “ Add chest firm to the above and repeat, (1! 2! ect.)  
 6— “ “ Head-chest-neck firm, toe stand, fallout d, (1! 2! ect.)  
 7— “ “ R. cross e-c, fallout c, knees bend, (1! 2! 1! 2! ect.)  
 8— “ “ Cross a-d-c, fallout c, knees bend, (1! 2! 1! 2! ect.)  
 9— “ “ Cross e-c, 1! Walk e-knees bend, 2! Neck firm, 3! posit., 4!
10. Breathe in! . . . Out! . . . In! . . . Out! . . . Head-hips firm! In! . . . Out! . . . Inhale! . . . Exhale! . . . Inhale! . . . Breathe out! . . . In! . . .  
 If the school is warm give a few order movements similar to those in 1.

## EXERCISES FOR THE EIGHTH GRADE.

May be executed with dumb-bells.

### I.

1. Attention! Stand! Fall. a! . . . d! Hips firm! Heels raise! Change feet!  
Cross e! d, c, 1! 2! 1! 2! 1! 2! 1! 2! 1! 2! 1! 2! 1! 2! 1! 2! Position!
2. Neck firm! Elbows back! . . . Stretch! . . . Walk e! Stretch! Fall. b! Forw. bend! Heads up! Position!
3. As heretofore spend about 60 seconds in *thorough* breathing exercises, with firms and crosses.
4. 1—Heels raise, cross c, 1! 2, 3. walk d, 1! 2, 3. Position, 1! 2, 3. (12 measures of waltz time.)  
2—Knees bend! With a spring, L. or R. about face! (for hall or yard exercise.)
5. 1—(Counts, 30-40.) Up. stretch, touch, walk e, 1! Position, 2!  
2— “ “ Forw. reach, cross a, walk a, 1! Position, 2!  
3— “ “ Cross d, walk d, 1! Position, 2!
6. Cross c, backw. bend, 1! 2, 3. Walk e, 1! 2, 3. Position, 1! 2, 3. (12 measures waltz time.)  
Cross a, fall. a, slight backw. bend, 1! 2, 3. Position, 1! 2, 3. (12 measures waltz time.)
7. (Counts, 30-40.) Cross a, walk a, L. (R.) bend, 1! Position, 2!  
“ “ Cross b, L. (R.) twist, 1! Position, 2!  
Cross c, L. (R.) bend, 1! 2, 3. Hips firm, 1! 2, 3. Position, 1! 2, 3. (32 measures of waltz time.)  
Half crook, L. R. twist, 1! 2, 3. Cross a, 1! 2, 3. Position, 1! 2, 3.
8. Hips firm! Inhale! . . . Push in! Exhale! (Ect. for 60 seconds.)
9. 1—(Counts, 30-40.) Cross a-c, walk e, knees bend, 1! Position, 2!  
2— “ “ Cross a fall. b, 1! Position, 2!  
3— “ “ Cross c, toe stand, walk e, 1! change feet, 2!
10. Breathing exercises as heretofore during 50 seconds.  
NOTE.—If time allows or pupils are warm give a few easy order movements. With dumb-bells, all alphabetic movements are the same as in free hand exercises so far as the position of the arms is concerned. Insist from the first that the movements be executed with vigor.

### 2.

1. Take bells! (Secure a good formation.)
2. Cross b, walk b, 1! 2, 3. Backw. bend, 1! 2, 3. Chest firm, 1! 2, 3. A. position, 1! 2, 3. (32 measures waltz time.)
3. Forw. reach. upw. stretch, inhale, 1! 2, 3. 1! 2, 3. Exhale, 1! 2, 3. (24 waltz measures.)
4. Toe stand, 1! 2, 3. Half crook, forw. reach, 1! 2, 3. Upw. strike, 1! 2, 3. Posit., 1! 2, 3. (24 waltz measures.)
5. (Counts, 30-40.) Cross a-d, walk c, 1! Position, 2!  
“ “ Cross b, walk b, 1! Position, 2!
6. Cross c, walk c, 1! 2, 3. Forw. bend, 1! 2, 3. Neck firm, 1! 2, 3. Position, 1! 2, 3. (32 waltz measures.)



7. (Counts, 30-40.) Walk a, upw. stretch, L. (R.) bend, 1! 2, 3. Chest firm, position, 1! 2, 3.  
(Counts, 30-40.) Cross a, walk e, L. (R.) twist, 1! 2, 3. Forw. reach, 1! 2, 3.  
(Counts, 30-40.) Upw. strike, 1! 2, 3. Hips firm, position, 1! 2, 3.
8. Cross c, inhale!...Exhale!...Breathe in!...Out!..In!...ect.
9. (Counts, 30-40.) Boys, cross a, fall. a, 1! 2, 3. Cross b, 1! 2, 3. Upw. strike, 1! 2, 3. Cross c, position, 1! 2, 3.  
(Counts, 30-40.) Girls, cross c, fall. b, 1! 2, 3. Upw. strike, 1! 2, 3. Neck firm, 1! 2, 3. Hips firm, position, 1! 2, 3.  
(Girls' and boys' exercises change.)
10. Hips firm! Breathe in!...Out!...In!...Out!..In!...ect.  
(Composed and used by Miss Alice Christianar of Mayflower School.)

### 3.

1. Take bells and secure a symmetrical formation.
2. Cross c! Slightly backward bend! Twist arms c to d six or eight times.
3. Breathing exercises.
4. (Rather slowly.) Forward, upward stretch, fingers touch, toe stand fallout d, 1! Change feet, cross c, 2! Hips firm, L. bend, fallout b, 3! Position, 4!  
The same with the R. leg.
5. 1—Forward, upward stretch, touch, touch, cross c, 1! Walk e, position, 2!  
2—Cross e-c, 1! Walk d, 2! Sideways upward stretch, neck firm, 3! Position, 4!  
3—L. hand, chest firm, L. foot walk, R. hand hip firm, 1! Feet and hands change, 2!  
(Execute each 5 with vigor from sixteen to twenty times.)
6. (Alternate slowly.) R. cross c, L. cross a, backward bend, fallout a, 1! Position, 2!  
(Execute about eight times. Stretch the crosses.)
7. Neck firm, L. (R.) bend, 1! 2! 1! 2! ect.  
Cross a, L. (R.) twist, 1! 2! 1! 2! ect.  
Cross c, 1! Fallout b, 2! L. (R.) bend, 3! Position, 4!  
Head firm, 1! L. (R.) twist, 2! Chest firm, 3! Position, 4!  
(Execute each 7 from sixteen to twenty times.)
8. Reach stoop, fallout a! Breathe out! Slowly, forward upward stretch, breathe in! Change feet! Reach stoop! Breathe out! Upward stretch, breathe in!  
Take eight or ten deep inhalations. With a spring change feet each time.
9. Half crook, knee bend, cross a-c, 1! Position, 2!  
Forward upward stretch, touch, cross c, toe stand walk e, knees bend, 1! Position, 2!  
Cross b-d, 1! Toe stand fallout c, 2! Cross c, neck firm, 3! Position, 4!  
Half crook, 1! Forward upward stretch, neck firm, 2! Fallout c, 3! Cross c, position, 4! (Execute each movement from twelve to twenty times.)
10. Cross a, L. bend! Breathe in! Out! R. bend, cross c! Breathe in!  
(This series was printed several years ago for grade and high school pupils for home exercises.)

## 4.

1. Use the time for 1 in securing a symmetrical arrangement of the lines, placing taller pupils rearward.
2. Cross a-neck firm 1! 2, 3. Hips firm, posit., 1! 2, 3. (16 waltz measures. Slight back, bending.)
3. Cross c, walk e, breathe in, 1! 2, 3. Hips firm, position, out, 1! 2, 3. (16 waltz measures.)
4. Half crook, heel lift, cross e, 1! 2, 3. Position, chest firm, 1! 2, 3. (16 waltz measures.)
5. Boys, (alternate lines,) cross a, walk a, 1! 2! 1! 2! ect. Girls, (alternate line,) cross c, walk e, 1! 2! 1! 2! ect. Boys' and girls' exercises change. (64 measures, medium to fast march time.)
6. Cross a, fall b, 1! 2, 3. Chest firm, 1! 2, 3. Cross c, 1! 2, 3. Position, 1! 2, 3. (16 waltz measures. Slight backw. bending.)
7. Neck firm L. (R.) bend, 1! 2! (32 measures, march.) Stretch, touch, L. (R.) twist, 1! 2! (32 measures, march.) Cross a-c, L. (R.) bend, walk e, 1! 2, 3. (16 measures, waltz.) Cross b, L. (R.) twist, 1! e! 2! A! 3! Posit., 1! 2, 3. (16 measures, waltz.)
8. Waist firm! Breathe in, 1! 2, 3. 1! 2, 3, out, 1! 2, 3. (Repeat and emphasize deep breathing.)
9. Boys—Knees bend, stretch, touch, 1! 2, 3. Girls—Fall. b, cross a-c, 1! 2, 3. (32 measures, medium to fast waltz time.)
10. Cross a-c, breathe in, 1! 2, 3. 1! 2, 3. Hips firm, out, 1! 2, 3. (Repeat several times.)

## 5.

1. Take bells and execute a few order movements.
2. L. cross c, R. cross a-d, backw. bend, fall. b, 1! 2, 3. (24 waltz measures.)
3. A-c, breathe in! . . . Out! . . . Again, in! . . . Out! . . . ect.
4. Half crook, heel raise, cross c, 1! 2, 3. Stretch, touch, position, 1! 2, 3. (24 waltz measures.)
5. 1—(Counts, 24-30.) Cross a-d, 1! Position, 2!  
2—(Counts, 24-30.) Alternate lines, stretch, touch, on 1, cross c, on 2, other lines cross c on 1, stretch touch on 2.  
3—Repeat the above adding walk e.
6. Girls forw. boys backw., (alternate,) bend, cross e, 1! 2, 3. (24 waltz measures.)
7. Girls L. (R.) bend, boys twist, cross a, 1! Chest firm, position, 2! (16-20 march measures. Then girls' and boys' exercises change.) Repeat the above in waltz time.
8. Waist firm! Breathe in! . . . Out! . . . In! . . . ect.
9. (Counts, 30-40.) Girls stretch, touch, boys c, knees bend, 1! Change, 2! (Counts, 30-40.) Boys, about face! Repeat the above No. 9.
10. Pay particular attention to intercostal breathing.



6.

1. Take bells and secure symmetrical formation.
2. Upw. stretch, touch, 1! 2, 3. Fall. b, 1! 2, 3. Cross c, backw. bend, 1! 2, 3. Position, neck firm, 1! 2, 3.  
(Execute L. R. F. B. slowly, gracefully, twice, 24 measures waltz time.)
3. Slowly, gracefully, a-c, inhale! . . . Exhale! . . . To the right, inhale! . Position!
4. Cross a-d, fall. d, 1! 2, 3. Head firm, 1! 2, 3. Position, 1! 2, 3.  
(Slowly, gracefully, L. R. F. B. twice, 24 measures of waltz time.)
5. 1—(Counts, 20-30.) Upw. stretch, chest firm, walk e, 1! Position 2!  
2—(Counts, 20-30.) Cross a-c, walk a, 1! Position, 2!  
3—(Counts, 20-30.) A, take 1. B, 2.  
4—(Counts, 20-30.) A and B exercises change!  
5—The two halves of the school face the center and execute 3 and 4.  
6—Outside lines execute about face! Middle lines execute L. or R. face!  
A and B execute 3 and 4.
6. Chest firm, fall. a, 1! 2, 3. Backw. bend, cross c, 1! 2, 3. Position, 1! 2, 3.  
(As in 2.)
7. 1—(Counts, 20-30.) A. Cross a-c, walk e, L. (R.) bend, 1! Position, 2!  
2—(Counts, 20-30.) B. Cross a, chest firm, L. (R.) twist, 1! Position, 2!  
(In 1 and 2 use a quickstep, eight measures to the movement. . 32 counts.)  
3—(Counts, 20-30.) A. Fall c, cross a, 1! 2! 3! Neck firm, L. (R.) bend, 1! 2, 3. Position, 1! 2, 3.  
(Counts, 20-30.) B. Walk a, chest firm, 1! 2, 3. L. (R.) twist, cross e, 1! 2, 3. Position, 1! 2, 3.  
4—(Counts, 20-30.) A and B exercises change!  
(Execute 3 and 4 as in 2 and 6.)
8. Fall. b, neck firm, 1! Deeply, inhale! . . . Exhale! . . Repeat! . . Slowly, L. bend! Repeat! . . R. bend! Breathe deeply! . . . Position!
9. 1—(Counts, 20-30.) Fall. d, cross a, 1! 2, 3. Fall. a, head firm, 1! 2, 3. Cross e, walk e, 1! 2, 3. Neck firm, position, 1! 2, 3.  
2—(Counts, 20-30.) R. (L.) face, fall. e, upw. stretch, 1! 2, 3. Walk e, neck firm, 1! 2, 3. L. (R.) face, 1! 2, 3. Position, 1! 2, 3.  
3—(Counts, 20-30.) A. execute 1. B, 2.  
4—(Counts, 20-30.) A and B exercise change!  
(With 9 use fast waltz time. Execute each movement L. R. F. B. twice, using waltz music.)
10. Thorough breathing exercises as usual.  
NOTE 6.—Divide the school, calling the alternate lines divisions A and B. By so doing and by adopting the formation shown in V, 5 and 6, the teacher can obtain the maximum number of forms with a minimum of memory work. This series, well executed, by four to six lines of pupils, may serve for exhibition purposes.

# A PROGRESSION OF EXERCISES WITH A VARIETY OF FORMS IN NUMBERS 5, 7 and 9.

1. Stand! Pass! (To secure bells.) While marching arm movements, except crosses c and d, may be executed.
2. Fallout b! Upw. stretch! backw. bend! Neck firm! . . . Forw. bend! . . . Chest firm!  
Backw. bend! . . . Cross a! c-e! . . . Upw. stretch! . . . Position!
3. Breathing exercises as heretofore. Upw. stretch, breathe in! ect.
4. Neck firm! Toe stand, fallout d, 1! walk e, 2! ect.
5. 1—(Counts, 30-40.) Cross a! Neck firm, walk e, 1! Cross a, Position, 2  
2— “ Head firm! Upw. stretch, walk d, 1! Head firm, Position, 2!  
3— “ Neck firm! Upw. stretch, walk a, 1! Neck firm! position, 2!  
4— “ Cross c! Cross a, walk a, 1! Cross c, position, 2!  
5— “ Cross a! Head-neck firm, walk e, 1! Cross a, position, 2!  
6— “ Cross b! Cross e, upw. stretch, 1! Cross b, walk b, position, 2!  
7— “ Cross e! Cross b-c, walk c, 1! Cross e, position, 2!  
8— “ Cross a! Forw. upw. stretch, walk, e, 1! Cross a, position, 2!  
9— “ Upw. stretch! Cross d, walk d, 1! Upw. stretch, position, 2!  
10— “ Cross a, 1! Walk a, 2! Cross c-e, 3! Position, 4 (1! 2! 3! 4!)
6. R. face! Chest firm! Backw. bend! Fallout e! Stretch! . . Forw. bend! Backw. mend! ect.
7. 1—(Counts, 30-40.) Head firm! Neck firm, L. (R.) bend, 1! Head firm, position, 2!  
“ Neck firm! Upw. stretch, L. (R.) twist, 1! Neck firm, posit., 2!  
“ Cross a, 1! Half crook, 2! L. (R.) bend, 3! Cross a, position, 4!  
“ Neck firm! Fall. b, 1! Knees bend, 2! Forw. reach, 3! Neck firm, position, 4!  
2— “ Cross b! Cross e, walk e, L. (R.) bend, 1! Cross b, position, 2!  
“ Cross a! Neck Firm, L. (R.) twist, 1! Cross a, position, 2!  
“ Head firm, 1! Half crook, 2! L. (R.) bend, 3! position, head firm, 4!  
“ Chest firm, 1! Fall. b, 1! L. (R.) twist, 3! Chest firm, posit., 4!  
3— “ Neck firm! Upw. stretch, half crook, L. (R.) bend, 1! posit., 4!  
“ Cross a! Chest firm, L. (R.) twist, 1! Cross a, position, 2!  
“ Chest firm, 1! L. (R.) bend, 2! Fall. d, 3! position, 4!  
“ Head firm, 1! L. (R.) twist, 2! Chest firm, 3! position, 4!  
4— “ Upw. stretch! Walk e, chest firm, L. (R.) bend, 1! Upw. stretch, position, 2!  
“ Chest firm! Walk e, knees bend, L. (R.) twist, 1! position, 2!  
“ Cross a-e, 1! Knees bend, 2! Head firm, 3! a-e, position, 4!  
“ L. cross a, R. upw. stretch, alternate, L. (R.) twist, 1! position, 2!
8. Neck firm! Inhale! . . . Exhale! . . . Breathe in! . . . Out! . . . Fall. b. In! . .
9. 1— “ Cross a! Neck firm, half crook, 1! Cross a, position, 2!  
2— “ Neck firm! Upw. stretch, knees bend, 1! Neck firm, position, 2!  
3— “ Cross e! Cross c, (alt.), Fall. b, 1! Cross e, position, 2!  
4— “ Cross b! R. face! Chest firm, Fall. e, 1! Cross b, position, 2!  
5— “ Upw. stretch! Chest firm, half crook, knee bend, 1! Upw. stretch, position, 2!  
6— “ Cross b! Cross e-c, (alt.) knees bend, 1! Cross b, position, 2!  
7— “ Cross a, 1! Fall. b, 2! Cross c, chest firm, 3! Cross a, position, 4!  
8— “ Neck firm, 1! Fall. d, 2! Upw. stretch, cross d, 3! Cross a, position, 4!
10. Neck firm! Breathe in! . . . Out! . . . Fall. b! breathe in! . . . Out! . . . In! . .



## SCHOOL PLAY GROUNDS.

The city of Cleveland now owns about seventy acres of school property. It also owns in the neighborhood of fourteen hundred acres of park lands.

Upon the school property is built over sixty school buildings. Also out buildings for relief schools and manual training schools to the number of nineteen or twenty.

The buildings, together with such permanent improvements as fences, walks, lawns and trees occupy the major portion of the yards, leaving play surface of approximately eighteen square feet, (two square yards) for each child.

In the central districts of the city so many annex and relief buildings occupy the grounds that scarcely eight square feet of play ground surface remains for each of the several thousand children in this section.

At twenty-one of the buildings the surface of the play grounds is in fair condition. These grounds are the ones most used by the children.

No play ground apparatus of any description exists in any of the yards.

In many of them the surface has never been prepared so as to render it suitable for play. When this is done and play ground apparatus is introduced our opportunities for physical training will be greatly enlarged. Without special instructors such apparatus as swings and traveling and flying rings could be suspended from gas pipe frames in any of the yards. This would require no more supervision, if provided in sufficient quantities, than is now required to keep order on the grounds. On the other hand it would enable a much larger porportion of the children to take valuable exercise upon the play grounds than is now possible. With special instruction, exercises in the school yards could be greatly extended. The best authorities prescribe a minimum of thirty square feet per child for play ground surface. This, for an eighteen room building, gives a lot approximately 300 feet north and south by 220 feet east and west. In the cut on page 60 is indicated the space reserved for an eighteen room building, a six room annex, the girls' play ground, the two inch gas pipe frames from which swings, etc., are suspended, the boys' play ground, school gardens and a row of trees.

Javal's rule, in regard to the lighting of the school rooms, states that the lot line, from the building line, should be twice as great as the height of adjacent buildings. Hence, a lot of this size not only gives a fair amount of play surface but it also follows this rule in most cases, if the building is properly placed in the lot, thus providing plenty of light.

## PUBLIC PLAY GROUNDS.

The play grounds, provided through private contributions, at the Jewish Alliance at Hiram House and at Alta House, have illustrated during the past two or three years that children are hungry for play grounds and will use them extensively.

While the parks contain about fourteen hundred acres of land very little has as yet been done to render them available, as play grounds for children. A few swings have been placed, in rather crude fashion, in several of the small parks. Their constant use by large numbers of children is an indication of the extent to which such apparatus would be used were plenty of it supplied. It should be placed at short intervals throughout the larger parks and along the park ways. For its suspension neat and substantial pipe frames should be used. The surface of a small space should be prepared and upon it should be placed a frame and apparatus similar to that shown in cut 3—home play grounds. Such provisions for the children should be found wherever there are seats for adults. This would fill the parks with children. At the same time it would add greatly to their public value. While this should be done the facilities for free boating, bathing

and skating should be greatly increased. Some of the park police should be selected with reference to their ability to promote play and games among the children in the parks.

The vacant lots are being rapidly taken for building sites. Options should be secured upon some of these and they should be fitted up as public play grounds and placed under the supervision of the park police.



HIRAM HOUSE PLAY GROUND.

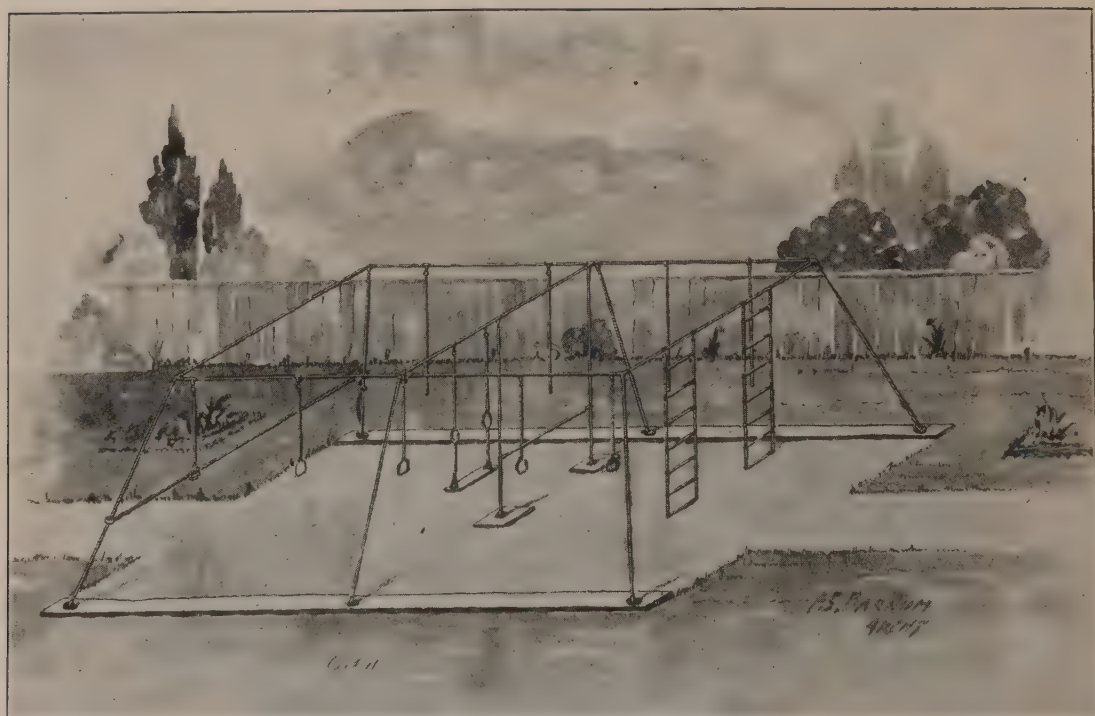
### NEED OF SPECIAL PROVISION FOR CITY CHILDREN.

The opportunities for vigorous outdoor exercise enjoyed by the children of the country are largely denied the child of the city. His activities are checked or curbed by all sorts of artificial environments. The police must pull him from the vacant lot and "Off the GRASS." Schools must be run in the interest of the tax payer and can not afford him amply equipped play grounds. The parks provide but little play ground and they are too far away for most children. The back yard is always at home. The few public play grounds which now exist are in the experimental stage and can accommodate but a few hundred children at best. The attic is cold. The basement is dirty. He is a nuisance in the parlor. In general the house is built for the social purposes of adults rather than to facilitate the rearing of wholesome children. The front yard is a lawn. But the back yard is largely free territory and this at least may be his domain.

Fortunately most of the homes in Cleveland possess a space in the back yard from thirty to sixty feet wide and equally as deep. In this can be erected a frame, such as is shown in the cuts. This can be equipped with play apparatus suitable to the age of the children who are to use it. Thus it can be made a constitution builder whose influence for health will offset many of the unfortunate factors of city life.

Such a structure may be placed upon the lawn, or a graveled and sanded space may be specially prepared for it.





Cut IV.

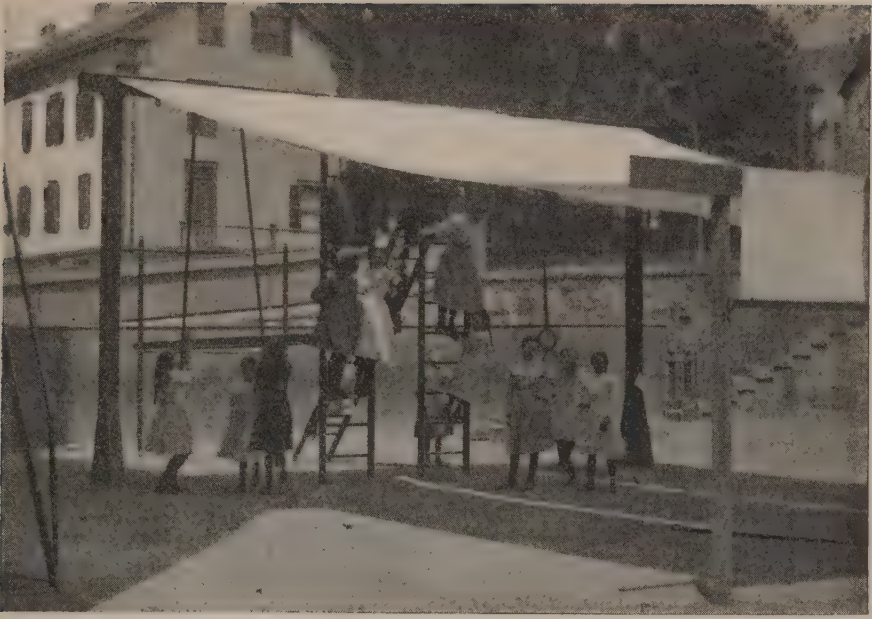
The foundation for the frame may be of plank, or the frame may be set in concrete.

Through the kindness of the Narragansett Machine Co. (Gymnasium outfitters,) cuts have been supplied. Cut IV. was prepared in the office of our school architect, Mr. Barnum.

The cuts are largely self-explanatory. It may be noted that such a frame as that presented in cut IV. may readily take the place of the clothes line poles which usually encumber the back yard. Its construction requires a plank or concrete foundation, about two hundred feet of inch-and-a-half iron pipe, necessary tees, flanges, screws and paint of a suitable color.

The equipment requires such apparatus as may be suited to the age and number of children in the family. It can readily be varied from year to year. Such apparatus as has been pictured are the varieties which are of interest to the average family. The whole structure can be converted into a lawn tent for the hot or rainy days of summer by the provision of a suitable canopy.

Perhaps it should be added that the use of the prehensile apparatus shown leads to development of the muscles of the arms and thorax. At present city children have at their constant command almost no resources for the development of these muscles. This largely accounts for the fact that so many of the children who are not compelled to do much work at home are so slender and that so many of the young men and women in our well-to-do homes are subnormal in their muscular development.



A SUMMER PLAY GROUND



Cut III.  
55





The illustrations of cycle skates, golfette, tether tennis and lawn bowls were loaned by A. G. Spalding & Bros.

### CYCLE SKATES.

It has been a source of wonder to me that boys and girls, with their untiring loyalty to the bicycle, have never discovered and adopted the ball bearing cycle skates. Ice skates are better when the ice is good, but the cycle skates can be used on the brick and asphalt pavements and on many of the sidewalks. They are convenient to carry and inexpensive.



### LAWN TENNIS.

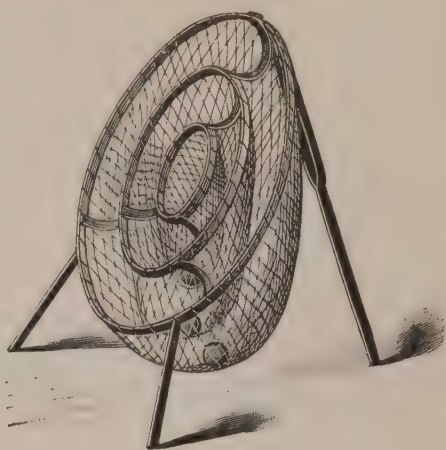
This game, so popular fifteen years ago, fell into the hands of the specialists. The court must be an expensive affair. The apparatus *official*. The dress *stylish*. Hence this most delightful and wholesome of games is dead. May it soon be resurrected in some more practical and less formal and expensive fashion.

### TETHER TENNIS.

"This game was originally introduced for the purpose of practicing various strokes at Lawn Tennis. It has now developed into a game having special merits of its own. The implements consist of an upright pole standing 9 or 10 feet out of the ground, having a line marked around the pole 6 feet from the ground. Attached to the top of the pole is a piece of cord, at the end of which is fastened a Lawn Tennis ball. A line is drawn on the ground 3 feet from the pole on opposite sides of it. The players stand outside this line, using an ordinary Lawn Tennis racket. The game is to wind the cord, with the ball attached, round the pole and above the line.

The game is usually started by tossing for service. The winner then takes the ball in his hand, and with the racket drives it around the pole; the opponent stops the progress of the ball and endeavors to drive it back again

and round the pole in the opposite direction. The player getting the ball round the pole and above the line, wins the game. A set is usually the best of eleven games. The service may either be taken alternately or continuously until the server loses a game. This game may be played in any garden having an area of about six square yards.



### GOLFETTE.

An interesting and fascinating game. The object is to loft the ball into the centre net. The inner net counts 3, the centre net 2, the outer net 1 point. Distance, from 15 to 25 feet from net. Regular golf clubs and ball are used. Adapted for indoor or outdoor use.

### LAWN BOWLS.

Lawn Bowls is a favorite English game. Printed rules go with the sets of balls and jacks.

### ARCHERY.

Some twenty years ago Maurice Thompson wrote several delightful magazine articles on the subject of archery. An immediate result was a revival in this sport. While it proved to be something of a fad the sporting catalogues still quote prices on lawn archery outfits and since the practice of archery is both pleasant recreation and possesses some elements of real value, let us hope that it may be revived.

### CROQUET.

Twenty years ago the writer was an expert croquet player and now that the game is being revived he will be pardoned for commenting upon it. It is mentioned simply to call attention to an example of a large class of games which, while entertaining, are negatively harmful for growing children. It may be classed with the sedentary games and may be of recreative value for the individual who has already fatigued this muscular system through the doing of a hard day's work.

During such hours as it would be pleasant and suitable for children to play croquet they should be engaged in games and exercises which give real exercise and valuable training. Croquet, marbles, tops and similar games give a slight training in muscular control for a few muscles and an indifferent training of physical judgment. On the other hand the elements of gracefulness, strength, quickness and muscular control, in any considerable degree, are entirely lacking.



and hence children who spend much time on such games are liable to become loafers. So far as the muscular system goes they become lazy. We should determine carefully in such matters, for the games of childhood are far more potent as an educational factor than the traditions of the schools would lead us to believe. Ninety-nine of every hundred of the acts of life are performed by the voluntary muscles which, together with the motor nerve cells, receive their training largely through the exercises and games of childhood. Were the possibilities of physical training understood and appreciated our methods of education would be revised.

## CONCERNING THE HYGIENE OF THE EYES AND EARS.

During the first three or four years of school life the largest percentage of eye trouble can be remedied. During these years very many cases of strabismus, (cross eyes) can be cured through the use of properly fitted glasses. In many of the cases in which there is a difference in vision between the eyes the more defective of the eyes can be saved, whereas its use is lost if no remedy is applied until the child is in the seventh or eighth grade. Many cases of this kind have been benefited through the efforts of the teachers.

Over 10 per cent of the first grade children were reported, both last year and this year, as having defects of vision. This would suggest that approximately half of the defectives are noticeably abnormal when they enter school.

Full instructions for testing the eyes and ears are printed upon the back of the teacher's report blank.

During 1900 correct reports (above first grade) included 30,045 cases.

During 1901 correct reports (above first grade) included 32,589 cases.

During 1900, of the 30,045 cases, 6,221, or 20.7 per cent, were reported as having defects.

During 1901, of the 32,589 cases, 6,104, or 18.7 per cent, were reported as having defects.

It will be remembered that during 1901 only cases new to the Cleveland school and those whose eyes or ears were reported as defective in 1900 were re-examined. No doubt a few cases which developed eye and ear trouble during 1900 are not included in the latest reports. On the other hand the diminution of 2 per cent in the total defectives indicate progress in caring for the eyes of the school children.

Special attention should be given to the hygiene of the eyes in the third grade. During this year the percentage of defectives shows the largest increase—3 per cent. Of all the grades the sixth shows the largest percentage of defectives. The reports would indicate that approximately 5 per cent of the children develop those defects of the eyes and ears which can be detected by means of the tests used, after their first year in school.

It is noticeable that the reliable reports of first grade teachers give substantially the same percentage of defectives at the end of 1901 as at the end of 1900, i. e. 14 per cent.

Less than 5 per cent of the first grades show as poor vision in one or both eyes as  $\frac{1}{2}\%$ , while over eight per cent of the children above the first grade are  $\frac{4}{10}\%$  or worse.

(For further information on the subject see bibliography, page 63).

Based upon the available statistics of 30,045 carefully examined cases, the following would be a typical teacher's report. The reports returned to the office should be similar in form.

Department of School Hygiene, Cleveland Public Schools.

REPORT OF TEACHER.

.....School. ....190.....  
Sixth Grade. ....Teacher.

NAME.	AGE.	SEX.	VISION.		HEARING.	REMARKS.
			R. E.	L. E.		
Jessie Walton.....	12	F	20-	30		Headaches frequent.
Annie Brownell.....	12	F	...	100		R. eye normal.
Olga Hicks.....	14	F	50	50-		Glasses Relieve.
John Kentucky .....	14	M	100	200-	Defect.	Glasses do not relieve.
Jennie Landon.....	12	F	20-	20-		Red eyes. Headache.
John Bolton.....	12	M	20-	50+		Eyes crossed.
Emelia Case.....	11	F	...	...	Defect.	Also catarrh.
Emma Dennison.....	13	F	40	40		Under treatment.
Ella Dunham.....	12	F	30-	30-		Objects to glasses.
James Lincoln.....	12	M	30-	30		Glasses relieve.

Number of pupils in room.....	44
“ “ “ examined.....	12
“ “ “ with defects of special senses.....	10
“ “ “ wearing glasses at time of examination.....	3
“ “ “ who do not appear to see well with glasses.....	1
“ “ “ who appear to have crossed eyes.....	1
“ “ “ who do not hear well according to Gale's test.....	2

VENTILATION.

Scarcely too much attention can be given to this matter. On the whole improvement has taken place during the past few years. The variations in the systems of ventilation in use in the different buildings, renders it necessary for teachers to exercise considerable judgment. In many of the relief buildings the careful use of the windows is the only recourse. This is also the case in many of the older buildings. Hence window ventilation should be understood by all teachers. In general it is best to pull down the upper sash for a short distance in the case of all of the windows rather than to open a few of the windows. The direction and velocity of the wind must be observed each time windows are opened, for on many days the windows on one side of a room are in very strong air currents while those on the other side of the room are protected from the prevailing wind.

It is during the exercise period that the windows can be opened with least risk. But even then care must be taken that pupils do not stand in strong cold draughts of air. Exercises in the halls, assembly rooms and yards possess a decided advantage in that they give an opportunity to ventilate thoroughly the rooms while the children are absent for exercise.

Close attention to the ventilating apparatus in those buildings which contain the Smead system will undoubtedly produce results. It is not fair to blame a system, defective though it may be, for evils which arise from inattention to its directions for turning the heat on and off.

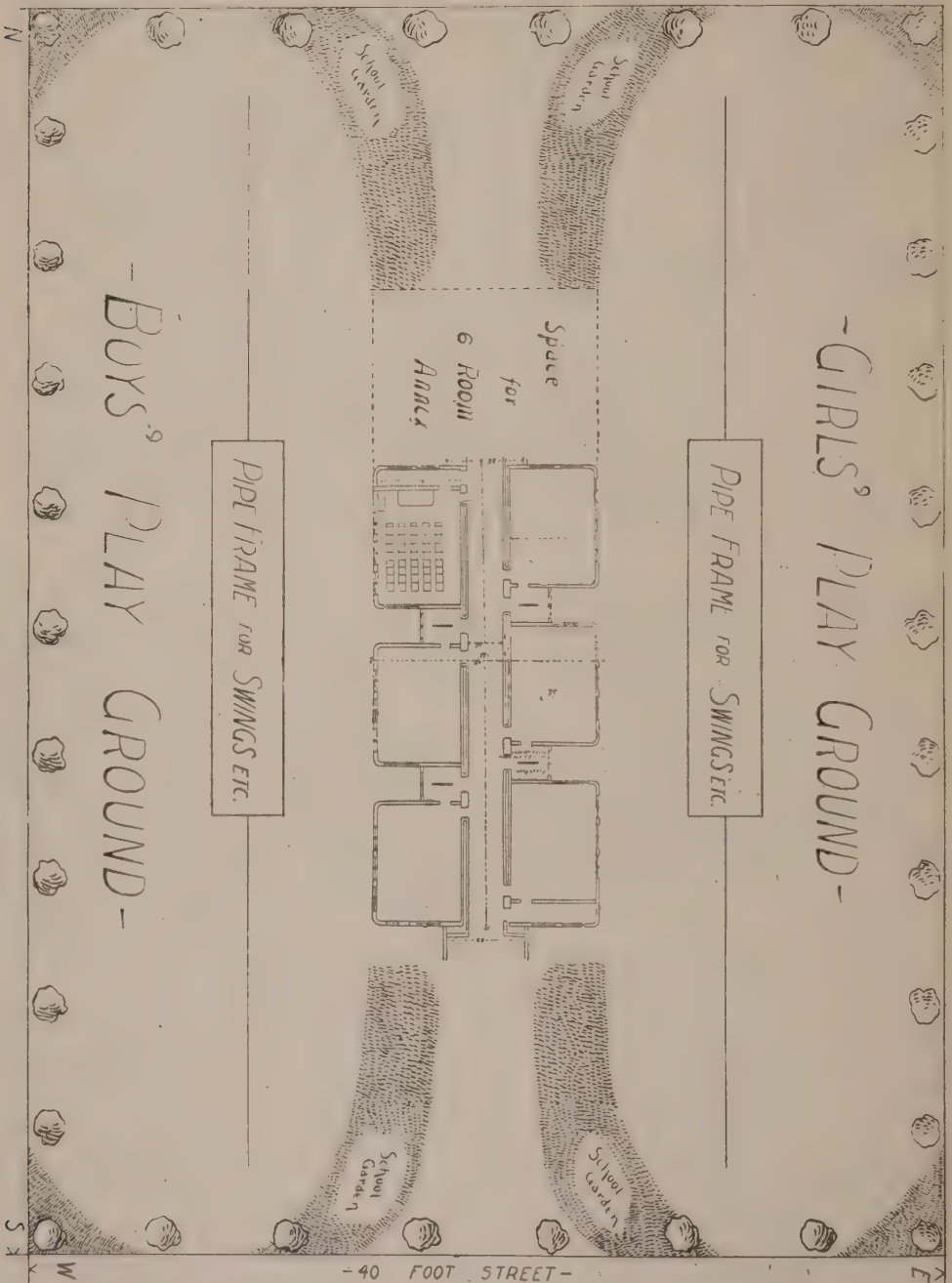
It is likely that all new buildings will contain good systems of forced ventilation which will materially assist the teacher in keeping the air within her room pure and at the proper temperature.



## TEMPERATURE RECORDS.

The regulations for these are well understood by the teachers and should be rigidly observed. Any teacher who habitually allows the temperature in her room to rise to 80 degrees, or higher, deserves severe discipline. Should it at any time be found that the temperature of the room is above 70, ventilation for its reduction should be immediate.

While in this country we consider 65° to 68° F. normal in English schools, as a matter of health, the teachers prescribe as normal 55° to 60°.



## REGARDING WINDOW SHADES.

This matter has been under observation for several years and I have satisfied myself that improper adjustment of window shades is one of the most fruitful causes of eye strain now operating within the schools.

In almost every building visited during the dark days of winter, some rooms have been found in which the window shades cut off part of the light. Even in the rooms of some teachers of experience, the shades are pulled half way down on dark, rainy afternoons. This is more especially the case in well lighted buildings.

During dark days this subject should receive special attention. Every available foot of window space should be used for lighting. On bright days no shade should be lowered except when necessary to keep the sun out of the children's faces. In quite a number of rooms which are lighted from two sides the teachers pull down the shades to exclude the sunlight from one side of the room in the morning. During the afternoon they lower the shades on the other side of the room, but forget to raise the shades which had been lowered during the morning. This may leave the room light enough for the teacher but often it is entirely too dark for the pupils.

Necessarily the position of the teacher, before the school, compels her to face the light. For some teachers with eye trouble this is disagreeable if not painful. To favor their own eyes this leads some teachers to darken the room, and after a time they form an incorrect concept of what school room light should be.

The attention of teachers is called to this matter in a very emphatic manner by the following statement of Superintendent Jones:

"My observations in school rooms strongly supports the statements made above by Dr. Baker. The subject merits more attention than it sometimes receives from teachers. Let us take advantage of all the facilities offered us for relieving the excessive eye-strain of our pupils."

Having secured a lot of sufficient size to contain a building in which the light of the sky cannot be cut off from any pupil by surrounding structures, a building so located as to be largely free from the annoyances of street noises, a building whose long axis runs north and south, thus admitting of an equitable distribution of sunlight to the rooms, a building with sanitary basement, well lighted halls, good plumbing, well adjusted system of heating and ventilating, and we have the essential surroundings for a sanitary school room.

THE SCHOOL ROOM.—The conditions which should be present in a sanitary school room have been made the subject of the most searching inquiry and experiment and have been determined with reasonable accuracy.

In school house construction the room is the unit and every other feature of the building should be subservient to its utility from both the pedagogical and the sanitary standpoint. And if the room is thoroughly sanitary the pedagogue will soon agree that his work is greatly facilitated thereby. Good sanitation means bodily comfort. Bodily comfort allows the teacher to command prolonged periods of attention. Bodily discomfort takes the attention from school work and expends it in various ways in attempting to secure ease for tired muscles.

On the opposite page is given an outline of the floor plan for an 18-room building. Size of lot (according to Javal's rule), east and west, 220 feet; north and south, 300 feet.

The building lines are 70 to 80 feet from the lot lines on all sides, thus providing some immunity from street noises and for the continuance of sufficient light. The lot should be larger rather than smaller.

The main body of the building is 132x84 feet. This gives a minimum width of hall of 10 feet. But an assembly room approximately 60x90 feet is supposed to compensate for the rather narrow hall.

It will be noticed that each room contains plenty of windows on two sides of the room. This feature is found in no building within the city.

The southeast corner room shows the amount and position of the furniture. In every room the seats and desks face the long way of the room.

The seating capacity of this building is approximately 700. The plan suggests an open faced locker of slate or similar material, so that the clothing of each child may be isolated from that of others, and so that the room may be thoroughly disinfected.

The lighting of the building is materially facilitated through the extensive use of chipped glass.



SEATS AND DESKS.—These should be durable and as simple in construction as is consistent with thorough adjustability. Cardinal points in construction are:

The *difference* between the seat and desk top should be such that matter on the top of the desk is from 14 to 18 inches from the child's eyes.

The *distance* between the edge of seat and desk should be minus so that in writing the child may the more easily maintain an upright position.

The *height of seat* must be such that the feet rest squarely upon the floor—i. e. 2-7 of the entire height or the length from the knee to the sole.

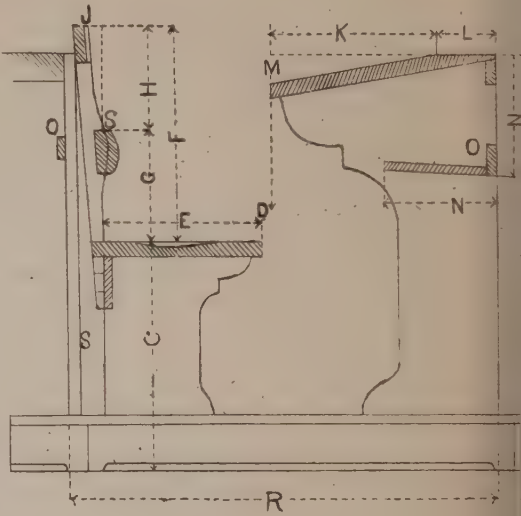
The *slope* of the desk should be 1 in 6 in order that the head may be held erect while the eyes are engaged in desk work.

The cut on the left, adapted from a German work by Eulenberg and Bach, gives the specifications for a seat and desk for a pupil 68.9 inches in height. The dimensions are in centimeters.

- R, (depth of seat and desk) equals.....78.
- C+M+D, (inner height of desk) equals 48
- & 30 or.....78.
- L and K, (parts of desk top) equals 10 & 35
- or.....45.
- N, (the book shelf) is placed below L.....25.
- N, (the book shelf) is in width.....22.
- C, (height of seat) equals.....48.
- E, (depth of seat) equals.....35.
- C+G+H, (height back supports) equals....44.
- G, (height of cross rest S) equals.....22.
- J, (shoulder rest slope) equals..... 3.
- C equals 3-11, N 1-8, E 1-5, C+G+H 1-4, G 1-8

of the total height of the body. From thousands of measurements of children, the tables are prepared from which these specifications are deducted. Within certain limitations the specifications vary the dimensions according to height and length of trunk. In some European states great care is taken in seating and desking school children. In this country but small progress has been made in this direction.

We should be looking forward to the time when this very fruitful cause of curvature of the spine, short sight and nervous troubles shall be mitigated through the use of school furniture which can be readily and accurately adjusted to fit the child. This cut suggests that the principal specifications for its construction are available.



## BIBLIOGRAPHY.

Recently the following pamphlets have been issued by the Commissioner of Education:

Experimental Study of Children.

Sanitary Legislation Affecting Schools.

Means for Spreading Hygienic Knowledge Among the People.

Medical Inspection of Schools.

Athletic Gymnastics.

School Teachers' Struggle Against Alcoholism.

Medical School Courses.

Alcohol, Physiology and Superintendence.

Swedish Gymnastics.

The report of the Commissioner for 1891 and 1892, Vol. I, contains a very admirable historical statement concerning physical education. It can be found in the libraries.

Several very good reports of physical training in the Boston Schools have appeared. Of these the report for 1894 is quite complete.

Of the several publications in the field one reads *Mind and Body*, the organ of the Turner Bund. Also *Physical Education*, the organ of the American Association for the Advancement of Physical Education. This journal contains considerable matter of interest to the professional. The *Posse Gymnasium* of Boston issues a publication relating largely to Swedish Gymnastics.

Of the books at command Posse's work on Swedish Educational Gymnastics and Enebuske's work—*Gymnastic Day's Orders*, are quite in line with the work in gymnastics in the Cleveland Schools. Miss E. M. Lindley's book on *Health in the Home*, is well printed, well illustrated and contains much good advice for any one who has the will to exercise at home. *Light Gymnastics*, by Dr. Wm. G. Anderson contains suggestions in chapters 1, 17 and 18, which should be of value to many teachers. *Physical Culture*, by Dr. C. W. Emerson, of the Emerson School of Oratory, is certainly an artistic work in the matter of printing and illustration. Many of our teachers who endeavor to incorporate the principles of aesthetics in their work, would find it very helpful.

Miss Jessie Bancroft has recently published an illustrated work on *School Gymnastics*. It has met with favorable comment and undoubtedly will be of service to teachers in a very practical way.

Of the works in English on German Gymnastics, that of Hans Ballin is well worthy of attention. It is well printed, illustrated and arranged for practical work in the school room.

Reprints of several articles on topics of interest to teachers in the Cleveland schools have been sent to the school buildings from time to time and can be had from the principals. Of these, mention may be made of the following: *School Hygiene*, *Outline of School Hygiene*, *Progress and Demands of School Hygiene*, *Sanitary School Rooms*, *Testing of the Special Senses in the Cleveland Public Schools* and *Medical Inspection of Schools*.

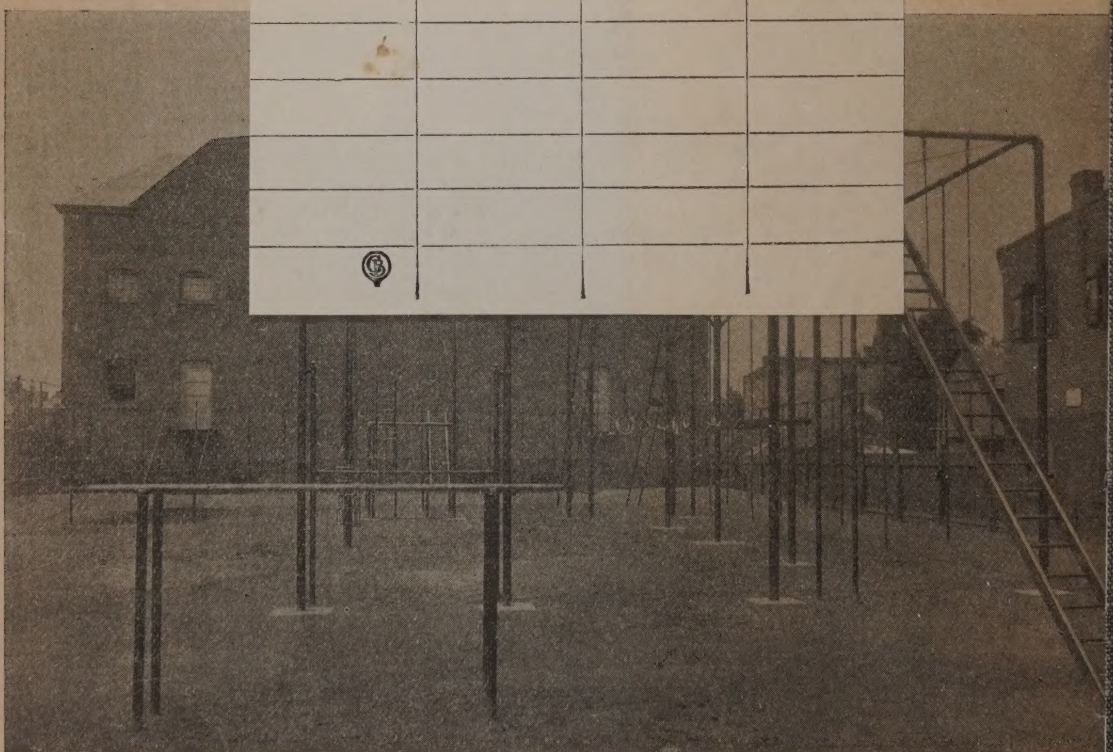
While in no sense complete, this list of publications may be supplemented by additional matter at the public libraries.



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